

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier:**
 - **Trade name:** COT
 - **Product number:** 806-00062-00
 - **REACH Registration number:** Not relevant
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application of the substance / the mixture:** Kit Component
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Quantum-Si, Inc.
29 Business Park Drive
Branford, CT 06405
+1 860-577-0668
www.quantum-si.com/
- **1.4 Emergency telephone number:**
Chemtrec (US and Canada): (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
 - **Hazard pictograms** Non-Regulated Material
 - **Signal word:** Non-Regulated Material
 - **Hazard statements:** Non-Regulated Material
- **Additional information:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
Contains 5 % of components with unknown hazards to the aquatic environment.
- **2.3 Other hazards:** None known
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 629-20-9	cyclooctatetraene	≤2.5%
EINECS: 211-080-3	⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
RTECS: GY 0175600		

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- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** If symptoms persist, call a physician.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Wash with soap and water.
Generally the product does not irritate the skin.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If eye irritation occurs, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- **5.3 Advice for firefighters**
Move containers from fire area if possible to do so without risk. Use water spray to cool fire-exposed containers.
- **Protective equipment:**
In case of any fire, wear protective equipment containing breathing apparatus and pressure requirements to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

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- **Information about fire and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Hand protection** Protective gloves recommended in manufacturing.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye/face protection** Not required.
- **Environmental exposure controls** None

* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Yellow
- **Odour:** Odourless
- **Melting point/freezing point:** Not determined.
- **Boiling point or initial boiling point and boiling range** Not determined.
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** Not applicable.
- **Auto-ignition temperature:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH** 7.5

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· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density @ 20 °C:	1 g/cm ³
· Relative density:	Not determined.
· Vapour density:	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.0 g/l 0.00 %
· Change in condition	
· Evaporation rate:	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Non-Regulated Material
· Flammable gases	Non-Regulated Material
· Aerosols	Non-Regulated Material
· Oxidising gases	Non-Regulated Material
· Gases under pressure	Non-Regulated Material
· Flammable liquids	Non-Regulated Material
· Flammable solids	Non-Regulated Material
· Self-reactive substances and mixtures	Non-Regulated Material
· Pyrophoric liquids	Non-Regulated Material
· Pyrophoric solids	Non-Regulated Material
· Self-heating substances and mixtures	Non-Regulated Material
· Substances and mixtures, which emit flammable gases in contact with water	Non-Regulated Material
· Oxidising liquids	Non-Regulated Material
· Oxidising solids	Non-Regulated Material
· Organic peroxides	Non-Regulated Material
· Corrosive to metals	Non-Regulated Material
· Desensitised explosives	Non-Regulated Material

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SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:** No data available.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-single exposure**
Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-repeated exposure**
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients are listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

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Trade name: COT

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· 12.7 Other adverse effects

· Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation:

Observe all federal, state and local environmental regulations when disposing of this material.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.2 UN proper shipping name

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.3 Transport hazard class(es)

· ADR/ADN, ADN, IMDG, IATA

· Class

Non-Regulated Material

· 14.4 Packing group

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.5 Environmental hazards:

Not applicable.

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· UN "Model Regulation":

Non-Regulated Material

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Poisons Act

· Regulated explosives precursors

None of the ingredients are listed.

· Regulated poisons

None of the ingredients are listed.

· Reportable explosives precursors

None of the ingredients are listed.

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· Reportable poisons

None of the ingredients are listed.

· **Directive 2012/18/EU** Substance is not listed.

· **Named dangerous substances - ANNEX I** None of the ingredients are listed.

· National regulations:

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· *** Data compared to the previous version altered.**

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Version number 4 (replaces version 3)

Revision: 17.01.2024

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier:**
 - **Trade name:** Glucose Oxidase (Gox)
 - **Product number:** 806-00053-00
 - **REACH Registration number:** Not relevant
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application of the substance / the mixture:** Kit Component
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Quantum-Si, Inc.
29 Business Park Drive
Branford, CT 06405
+1 860-577-0668
www.quantum-si.com/
- **1.4 Emergency telephone number:**
Chemtrec (US and Canada): (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
 - **Hazard pictograms** Non-Regulated Material
 - **Signal word:** Non-Regulated Material
 - **Hazard statements:** Non-Regulated Material
- **Additional information:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
1 % of the mixture consists of component(s) of unknown toxicity.
Contains 1 % of components with unknown hazards to the aquatic environment.
- **2.3 Other hazards:** None known
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 1132-61-2	4-morpholinopropanesulphonic acid	≤2.5%
EINECS: 214-478-5	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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Trade name: Glucose Oxidase (Gox)

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** If symptoms persist, call a physician.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Wash with soap and water.
Generally the product does not irritate the skin.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If eye irritation occurs, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- **5.3 Advice for firefighters**
Move containers from fire area if possible to do so without risk. Use water spray to cool fire-exposed containers.
- **Protective equipment:**
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

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Trade name: Glucose Oxidase (Gox)

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- **Information about fire and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Hand protection** Protective gloves recommended in manufacturing.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye/face protection**



Goggles recommended during refilling

- **Environmental exposure controls** None

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Yellow
- **Odour:** Odourless
- **Melting point/freezing point:** Not determined.
- **Boiling point or initial boiling point and boiling range** ≥100 °C (7732-18-5 Water, distilled water, deionized water)
- **Flammability** Not applicable.

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· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Auto-ignition temperature:	Not applicable.
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure @ 20 °C:	≤23 hPa (7732-18-5 Water, distilled water, deionized water)
· Density and/or relative density	
· Density:	Not determined.
· Relative density:	Not determined.
· Vapour density:	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.0 g/l 0.00 %
· Change in condition	
· Evaporation rate:	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Non-Regulated Material
· Flammable gases	Non-Regulated Material
· Aerosols	Non-Regulated Material
· Oxidising gases	Non-Regulated Material
· Gases under pressure	Non-Regulated Material
· Flammable liquids	Non-Regulated Material
· Flammable solids	Non-Regulated Material
· Self-reactive substances and mixtures	Non-Regulated Material
· Pyrophoric liquids	Non-Regulated Material
· Pyrophoric solids	Non-Regulated Material
· Self-heating substances and mixtures	Non-Regulated Material
· Substances and mixtures, which emit flammable gases in contact with water	Non-Regulated Material

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· Oxidising liquids	Non-Regulated Material
· Oxidising solids	Non-Regulated Material
· Organic peroxides	Non-Regulated Material
· Corrosive to metals	Non-Regulated Material
· Desensitised explosives	Non-Regulated Material

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:** No data available.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-single exposure**
Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-repeated exposure**
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients are listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation:

Observe all federal, state and local environmental regulations when disposing of this material.

· Uncleaned packaging:

· Recommendation:

Disposal must be made according to official regulations.

· Recommended cleansing agents:

Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.2 UN proper shipping name

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.3 Transport hazard class(es)

· ADR/ADN, ADN, IMDG, IATA

· Class

Non-Regulated Material

· 14.4 Packing group

· ADR/ADN, IMDG, IATA

Non-Regulated Material

· 14.5 Environmental hazards:

Not applicable.

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· UN "Model Regulation":

Non-Regulated Material

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Poisons Act

· Regulated explosives precursors

None of the ingredients are listed.

· Regulated poisons

None of the ingredients are listed.

· Reportable explosives precursors

None of the ingredients are listed.

(Contd. on page 7)

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 4 (replaces version 3)

Revision: 17.01.2024

Trade name: Glucose Oxidase (Gox)

(Contd. of page 6)

· Reportable poisons

None of the ingredients are listed.

· **Directive 2012/18/EU** Substance is not listed.

· **Named dangerous substances - ANNEX I** None of the ingredients are listed.

· National regulations:

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106

SAFETY DATA SHEET

This document is in compliance with requirements for Safety Data Sheets implemented under the European Union regulation on the Classification, Labelling, and Packaging of Substances and Mixtures (EC No. 1272/2008, EU 2020/878; EU 2024/2865) and the standard of other nations. See section 16 for more information on the national regulations pertinent to this documentation.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

- **PRODUCT NAME:** CONTROL PEPTIDE MIXTURE 4
- **PRODUCT CODE:** 806-00089-00

1.2 PRODUCT USE AND RESTRICTIONS

- **IDENTIFIED USE:** Kit component for protein sequencing process.
- **USES ADVISED AGAINST:** Procedures not related to the intended use of this product.
- **IDENTIFIED USERS:** For sale to, use, and storage by personnel trained in handling product safely.

1.3 MANUFACTURER INFORMATION

- **MANUFACTURER/SUPPLIER:** Quantum SI, Inc.
- **ADDRESS:** 29 Business Park Dr., Suite C; Branford, CT; 06405
- **BUSINESS PHONE:** 866-688-7374 (8:00 am to 5:00 pm, Eastern Standard Time)
- **EMERGENCY PHONE:** +1- Chemtrec (US and Canada): +1-800-424-9300
Outside US): +1-703- 527-3887
- **Email:** support@quantum-si.com

SECTION 2: HAZARD IDENTIFICATION

2.1 HAZARD CLASSIFICATION (EU CLP)

- Not classified as hazardous under pertinent national standards.

2.2 LABEL ELEMENTS (EU CLP)

- **Hazard Pictograms:** Not applicable.
- **Signal Word:** Not applicable.
- **Hazard Statements:** Not applicable.
- **Precautionary Statements:** Not applicable.

2.3 OTHER PERTINENT DATA ON HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS

- **Contains no material classified as follows:** Endocrine disrupting properties: In relation to human health and in relation to the environment (ED). Persistent, Bioaccumulative and Toxic (PBT); Very persistent and very bioaccumulative (vPvB); Persistent, mobile and toxic (PMT)' Very persistent and very mobile (vPvM).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 IDENTIFICATION OF HAZARDOUS SUBSTANCES IN PRODUCT

NAME	CAS NUMBER	GHS CLASSIFICATION COMPONENT	HAZARD FOR	% (w/w)
The components of this product are not hazardous or are below cut-off concentrations (and do not contribute physical or health hazards at the concentrations present in solution).				100%

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- BASIC FIRST AID BY EXPOSURE ROUTE:**

<u>AREA EXPOSED</u>	<u>TREATMENT</u>
---------------------	------------------

Eye Contact:	Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention should any irritation develop.
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Skin Contact:	Flush area with warm, running water for several minutes. Seek medical attention should any irritation develop.
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Inhalation:	Obtain fresh air. Seek medical attention if irritation develops after exposure ends.
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Ingestion:	If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.
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4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- ACUTE HEALTH EFFECTS:**

<u>AREA EXPOSED</u>	<u>EFFECTS</u>
---------------------	----------------

Eye Contact:	May cause eye irritation upon prolonged exposure.
---------------------	---

Skin Contact:	May cause skin irritation upon prolonged exposure.
----------------------	--

Inhalation:	Not anticipated to be a potential route of exposure.
--------------------	--

Ingestion:	Not anticipated to be a potential route of exposure.
-------------------	--

- CHRONIC HEALTH EFFECTS:** None known.

- TARGET ORGANS:** None known.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None known.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other type.
- UNSUITABLE FIRE EXTINGUISHING MEDIA:** None.

5.2 UNUSUAL HAZARDS IN FIRE SITUATIONS

<u>POTENTIAL HAZARD</u>	<u>DESCRIPTION FOR PRODUCT</u>
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Decomposition:	Generates irritating vapors, carbon monoxide, carbon dioxide.
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Incompatibilities:	See Section 10 (Reactivity and Stability).
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Explosion Sensitivity to Mechanical Impact:	Not applicable.
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Explosion Sensitivity to Static Discharge:	Not applicable.
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5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases. Gloves and safety glasses must be worn when cleaning up spills. Use caution during clean-up; contaminated floors and items may be slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material. Subsequently, personnel can follow the instructions for incidental releases.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Use damp sponge or polypad to carefully cleanse contaminated area or items. If appropriate, further clean contaminated area and equipment with soap and water solution, followed by a water rinse.

6.2 ENVIRONMENTAL PRECAUTIONS

- **IN CASE OF SPILL:** Collect spillage promptly. Avoid response actions that can cause a release of a significant amount of substance into the environment. Avoid accidental dispersal of spilled material into soil, waterways, and sewers.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- **SPILL RESPONSE EQUIPMENT:** Polypad or sponge. Appropriate waste container.

6.4 REFERENCE TO OTHER SECTIONS

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- **HYGIENE PRACTICES:** Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of mists, sprays, or aerosols. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.
- **HANDLING PRACTICES:** Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use.

7.2 CONDITIONS FOR SAFE STORAGE

- **STORAGE PRACTICES:** Ensure all containers are correctly labeled. Store containers away from direct sunlight, and sources of intense heat. Store this product away from incompatible chemicals. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Empty containers may contain residual material; therefore, empty containers should be handled with care.
- **INCOMPATIBILITIES:** See Section 10 (Stability and Reactivity).

7.3 SPECIFIC END USES

- This product is for use in protein sequencing processes by trained laboratory personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** No airborne occupational exposure limits have been established.
- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** None established.
- **DERIVED NO EFFECTS LEVEL:** Not established.
- **PREDICTED NO EFFECT CONCENTRATION:** Not established.

8.2 EXPOSURE CONTROLS

- **GENERAL GUIDELINES:** This product is intended for use by trained personnel as part of a kit.



- **ENGINEERING CONTROLS:** Ensure the area has adequate ventilation to ensure minimal inhalation of mists or sprays occurs. Eye wash stations and safety showers should be readily available.
- **RESPIRATORY PROTECTION:** None needed under normal circumstances of use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

- **HAND PROTECTION:** None typically needed for anticipated use. Neoprene or nitrile gloves are recommended if skin contact can occur (e.g., spill clean-up). Ensure gloves are intact prior to use.
- **EYE PROTECTION:** Safety glasses are recommended if splash or spray can occur during use (e.g., during refilling of unit).
- **BODY PROTECTION:** Body protection suitable to task is recommended (e.g., laboratory coat).
- **OTHER PROTECTIVE MEASURES:** Wash hands during breaks and at the end of handling the material. Immediately remove any contaminated clothing.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

- Minimize the generation of mists, sprays, or aerosols while using this product. Avoid release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE AND DISTINGUISHING CHARACTERISTICS:**

<u>PROPERTY</u>	<u>DATA</u>
State:	Liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	Not determined
pH:	7.5.

- **PHYSICAL DATA:**

<u>PROPERTY</u>	<u>DATA</u>
Melting Point/Freezing Point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined.
Flash Point:	≥100 °C (≥212 °F)
Evaporation Rate (Water = 1):	Approximately 1.0
Flammability:	Not applicable.
Upper/Lower Explosion Limits	Not applicable.
Vapor Pressure:	@ 20C (68F) ≤23 hPa (≤17.3 mm Hg).
Vapor Density	Not determined.
Relative Density at 20 °C (68 °F)	1 g/cm ³ (8.345 lb./gal)
Solubility:	Totally soluble in water
Partition Coefficient/n-octanol/water:	Not determined
Autoignition Temperature:	Not applicable.
Decomposition Temperature:	Not determined.
Kinematic Viscosity:	Not determined.
Particle Characteristics:	Not applicable.

9.2 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

- **Information regarding Physical Hazard Classes** This product is not classified under any physical hazard class.
- **Other Safety Characteristics** Not applicable

9.3 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

Solvent Content:

- o Water: 97.6%
- o Volatile Organic Compound (VOC) Content: 0.0%

Solid Content: 1.0%:

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY AND CHEMICAL STABILITY

- The product is not reactive under typical conditions of use or handling.
- Normally stable under standard temperatures and pressures.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS (INCLUDING THOSE ASSOCIATED WITH FORESEEABLE EMERGENCY)

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.3 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals and adverse storage conditions.

10.4 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.5 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon oxides, carbon monoxide, carbon dioxide, and compounds of sodium, nitrogen, and chlorine.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON ACUTE TOXICITY

- **PRODUCT TOXICOLOGY DATA:** The following are calculated estimates for the product:
 - Acute Toxicity Estimate (Oral) > 5000 mg//kg
 - Acute Toxicity Estimate (Dermal) > 5000 mg//kg
 - Acute Toxicity Estimate (Inhalation) > 5 mg/L (dusts and mists)
- **DEGREE OF IRRITATION:** This product is not anticipated to cause skin or eye irritation.
- **SENSITIZATION:** This product does not contain any compound reported to as a skin or respiratory sensitizer.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazard Information) and Section 4 (First-Aid Measures) for additional details.
 - **Eyes:** May cause eye irritation upon prolonged exposure.
 - **Skin:** May cause skin irritation upon prolonged exposure.
 - **Inhalation** : Not anticipated to be a significant route of occupational exposure.
 - **Ingestion:** Not anticipated to be a significant route of occupational exposure.

11.2 INFORMATION ON CHRONIC TOXICITY

- **CARCINOGENICITY STATUS:** This product is not listed as a carcinogen by NTP, IARC, or OSHA.
- **REPRODUCTIVE TOXICITY INFORMATION:** Not applicable.
- **MUTAGENIC EFFECTS** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD:** Not applicable.

11.3 OTHER USEFUL TOXICOLOGY INFORMATION

- **ENDOCRINE-DISRUPTING PROPERTIES:** Not applicable.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ENVIRONMENTAL TOXICITY

- This product is not anticipated to be harmful to the environment.

12.2 PERSISTENCE AND DEGRADABILITY



- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.

SECTION 12: ECOLOGICAL INFORMATION (Continued)

12.3 BIOACCUMULATIVE POTENTIAL

- This product is not anticipated to bioaccumulate significantly.

12.4 MOBILITY IN SOIL

- Based on its total solubility in water, this product is expected to have significant mobility in soil.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

- Not classified as PBT or vPvB.

12.6 ENDOCRINE DISRUPTING PROPERTIES

- None reported.

12.7 OTHER ADVERSE ENVIRONMENTAL EFFECTS

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

- Dispose of in accordance with local, state, and national regulations.

13.2 DISPOSAL CONSIDERATIONS

- **EPA RCRA WASTE CODE:** Not applicable to wastes consisting only of this product.
- **SEWAGE DISPOSAL:** Waste should not be disposed of by release to sewers.

13.3 DISPOSITION OF EMPTY CONTAINERS

- Empty containers may contain residual material; therefore, empty containers should be handled with care.
- Empty containers should be discarded properly.

SECTION 14: TRANSPORT INFORMATION

14.1 HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS

- **IATA DESIGNATION:** Product is not regulated as a dangerous good by the International Air Transport Association.
- **IMO DESIGNATION:** Product is not regulated as a dangerous good by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None known.

14.3 SPECIAL PRECAUTIONS FOR TRANSPORTERS

- None established.

14.4 TRANSPORT IN BULK

- **ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:** Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 OTHER IMPORTANT SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS

- **E.U. REACH:** Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. REACH (1907/2006). Contains no substance with REACH Restrictions.

15.2 EUROPEAN UNION CHEMICAL SAFETY ASSESSMENT

- **ASSESSMENT INFORMATION:** No chemical safety assessment has been conducted.

SECTION 15: REGULATORY INFORMATION (Continued)

Additional information related to specific national requirements for other regions is listed in the following sections.

15.3 ARGENTINA: PERTINENT REGULATIONS

- STANDARD IRAM 41400-AR (Chemical Products - Safety Data Sheet): This safety data sheet is prepared in accordance with the requirements of Argentina.
- Carcinogenic Substances and Agents Registry. Not applicable.
- Control of Precursors and Essential Chemicals for the Preparation of Drugs: Not applicable.

15.4 AUSTRALIA: PERTINENT REGULATIONS

- National Code of Practice for the Preparation of Safety Data Sheets [NOHSC:2011(2003)]: This safety data sheet is prepared in accordance with the requirements of Australia.

15.5 BAHRAIN: PERTINENT REGULATIONS

- Resolution No. 4 of 2006 on the Management of Hazardous Chemicals (Articles 1 and 9): This safety data sheet is prepared in accordance with the requirements of Bahrain.

15.6 BRAZIL: PERTINENT REGULATIONS

- ABNT NBR 14725:2023 - Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Brazil.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.7 CHILE: PERTINENT REGULATIONS

- NCh 2245:2021 (Chemical Product Safety Data Sheet - Order and Content of Sections): This safety data sheet is prepared in accordance with the requirements of Chile.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.8 EGYPT: PERTINENT REGULATIONS

- Ministerial Decree No. 610/2020, which mandates the Egyptian Standard ES 8398 (Safety Data Sheet for Chemical Products — Content and Order of Sections). This safety data sheet is prepared in accordance with the requirements of Egypt.

15.9 INDIA: PERTINENT REGULATIONS

- Schedule 9 - The Manufacture, Storage, and Import of Hazardous Chemicals Rule, 1989: This safety data contains all information required under the regulations in India.

15.10 INDONESIA: PERTINENT REGULATIONS

- Decree of Ministry of Industry No.23/M-IND/PER/4/2013: This safety data contains all information required under Indonesian regulations.

15.11 ISRAEL: PERTINENT REGULATIONS

- Israel Standard 2302-1 (2004) - Classification, Packaging, Labeling, and Marking of Dangerous Materials: This safety data contains all information required under the regulations in Israel.

15.12 JAPAN: PERTINENT REGULATIONS

- JIS Z 7253:2019- (Safety Data Sheets for Chemical Products): This safety data contains all information required under the regulations in Japan.
- This product is used for research and development purposes.

15.13 JORDAN: PERTINENT REGULATIONS

- 29 CFR 1910.1200 (US Hazard Communication Standard): This safety data contains all information required under the regulations in Jordan.

15.14 KENYA: PERTINENT REGULATIONS

- Environmental Management and Coordination (Toxic and Hazardous Chemicals and Materials) Regulations. This safety data contains all information required under the regulations in Jordan.

SECTION 15: REGULATORY INFORMATION (Continued)

15.15 **KOSOVO: PERTINENT REGULATIONS**

- Article 24 of the Law on Chemicals. This safety data contains all information required under the regulations in Jordan.

15.16 **MALAYSIA: PERTINENT REGULATIONS**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. This safety data contains all information required under the regulations in Jordan.

15.17 **MEXICO: PERTINENT REGULATIONS**

- NOM-018-STPS-2015] – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Mexico.

15.18 **MOLDOVA: PERTINENT REGULATIONS**

- Government Decision No. 640 of 11-09-2024. This safety data sheet is prepared in accordance with the requirements of Mexico.

15.19 **NEW ZEALAND**

- Hazardous Substances (Safety Data Sheets) Notice 2017, which was amended in 2020. This safety data sheet is prepared in accordance with the requirements of New Zealand.
- New Zealand Inventory of Chemicals (NZIoC): This product is used for research and development purposes.

15.20 **OMAN**

- Ministerial Decision No. 248/97 (Requirements for Safety Data Sheets). This safety data sheet is prepared in accordance with the requirements of Oman.

15.21 **QATAR, SAUDI ARABIA, AND UNITED ARAB EMIRATES: PERTINENT REGULATIONS**

- Gulf Standardization Organization Technical Order 2654:2021 9 – The Global Harmonized System (GHS) in Gulf Cooperation Council (GCC) countries: This safety data sheet is prepared in accordance with the requirements of the Gulf States.

15.22 **SERBIA: PERTINENT REGULATIONS**

- Rulebook on the Contents of the Safety Data Sheet ("Official Gazette of the Republic of Serbia" No. 11/2024): This safety data sheet is prepared in accordance with the requirements of Serbia.

15.23 **SINGAPORE: PERTINENT REGULATIONS**

- Singapore Standard SS 586-3:2022 9 – Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods: This safety data sheet is prepared in accordance with the requirements of Singapore.
- Singapore Ozone-Depleting Substances List: No product component is listed.

15.24 **SOUTH AFRICA: PERTINENT REGULATIONS**

- Regulations for Hazardous Chemical Agents (RHCA) 2021, specifically in Regulation 14A: This safety data sheet is prepared in accordance with the requirements of South Africa.

15.25 **SOUTH KOREA: PERTINENT REGULATIONS**

- Public Notice No. 2016-19 9 – Standards for Classification and/or Labeling of Chemicals and for Materials Safety Data Sheets: This safety data sheet is prepared in accordance with the requirements of South Korea,
- This product is used for research and development purposes.

15.26 **SWITZERLAND: PERTINENT REGULATIONS**

- Chemicals Ordinance (ChemO): This safety data sheet is prepared in accordance with the requirements of Switzerland.
- Youth Employment Protection Ordinance (SR 822.115): Young people in basic vocational education and training may only work with this product if this is provided for in the respective education regulation in order to achieve the training objective, if the requirements of the education plan are fulfilled, and the applicable age restrictions are observed. Young people who are not in basic vocational training may

not work with this product. As young people, employees of both genders are considered up to 18 years of age. Maternity ordinance and Safety Ordinance (SR 822.111.52):

- Pregnant women and nursing mothers may only come into contact with this product during their work if it has been established on the basis of a risk assessment in accordance with Art. 63 ArGV 1 that there is no specific health risk to the mother and child or that this can be ruled out by taking suitable protective measures.

SECTION 15: REGULATORY INFORMATION (Continued)

15.27 TAIWAN: PERTINENT REGULATIONS

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861: This safety data sheet is prepared in accordance with the requirements of Taiwan.

15.28 THAILAND: PERTINENT REGULATIONS

- Hazard Classification and Communication System of Hazardous Substances B.E.2555 (2012): This safety data sheet has been prepared in accordance with Thai requirements.

15.29 TURKEY: PERTINENT REGULATIONS

- Annex 2 Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması" (KKDIK/Registration, Evaluation, Authorization and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of Turkey.

15.30 UNITED KINGDOM: PERTINENT REGULATIONS

- UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of the United Kingdom.

15.31 VIETNAM: PERTINENT REGULATIONS

- Circular No. 04/2012/TT-BCT and Decree No. 113/2017/ND-CP (Law on Chemicals 2007): This safety data sheet has been prepared in accordance with the requirements of Vietnam.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- DATE OF PREPARATION:** August 10, 2025
- SUPERCEDES:** Not applicable.
- CHANGE INDICATED:** New product.

16.2 DEFINITIONS

SECTION EXPLANATION OF TERMS/ABBREVIATIONS

ALL	EU: European Union. CLP: Union Classification, Labelling, and Packaging of Substances and Mixtures
3	CAS Number: Chemical Abstract Service Number, used by the American Chemical Society to uniquely identify a chemical.
8	OEL: Occupational Exposure Limit. ppm: Parts per Million. mg/m³: Milligrams per cubic meter.
9	pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, a pH value of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
11	CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designated route of administration.
12	EC50: Effect Concentration. PBT or vPvB: Persistent/ Bioaccumulative /Toxic; Very Persistent/ Very Bioaccumulative
15	REACH: European Union regulation concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances

SAFETY DATA SHEET

This document is in compliance with requirements for Safety Data Sheets implemented under the European Union regulation on the Classification, Labelling, and Packaging of Substances and Mixtures (EC No. 1272/2008, EU 2020/878; EU 2024/2865) and the standard of other nations. See section 16 for more information on the national regulations pertinent to this documentation.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

- **PRODUCT NAME: RECOGNIZER 4 MIX (Binders)**
- **PRODUCT CODE: 806-00087-00**

1.2 PRODUCT USE AND RESTRICTIONS

- **IDENTIFIED USE:** Kit component for protein sequencing process.
- **USES ADVISED AGAINST:** Procedures not related to the intended use of this product.
- **IDENTIFIED USERS:** For sale to, use, and storage by personnel trained in handling product safely.

1.3 MANUFACTURER INFORMATION

- **MANUFACTURER/SUPPLIER:** Quantum SI, Inc.
- **ADDRESS:** 29 Business Park Dr., Suite C; Branford, CT; 06405
- **BUSINESS PHONE:** 866-688-7374 (8:00 am to 5:00 pm, Eastern Standard Time)
- **EMERGENCY PHONE:** +1- Chemtrec (US and Canada): +1-800-424-9300
Outside US): +1-703- 527-3887
- **Email:** support@quantum-si.com

SECTION 2: HAZARD IDENTIFICATION

2.1 HAZARD CLASSIFICATION (EU CLP)

- Not classified as hazardous under pertinent national standards.

2.2 LABEL ELEMENTS (EU CLP)

- **Hazard Pictograms:** Not applicable.
- **Signal Word:** Not applicable.
- **Hazard Statements:** Not applicable.
- **Precautionary Statements:** Not applicable.

2.3 OTHER PERTINENT DATA ON HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS

- **Contains no material classified as follows:** Endocrine disrupting properties: In relation to human health and in relation to the environment (ED). Persistent, Bioaccumulative and Toxic (PBT); Very persistent and very bioaccumulative (vPvB); Persistent, mobile and toxic (PMT)' Very persistent and very mobile (vPvM).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 IDENTIFICATION OF HAZARDOUS SUBSTANCES IN PRODUCT

NAME	CAS NUMBER	GHS CLASSIFICATION COMPONENT	HAZARD FOR	% (w/w)
The components of this product are not hazardous or are below cut-off concentrations (and do not contribute physical or health hazards at the concentrations present in solution).				100%

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- BASIC FIRST AID BY EXPOSURE ROUTE:**

AREA EXPOSED	TREATMENT
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Eye Contact:	Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention should any irritation develop.
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Skin Contact:	Flush area with warm, running water for several minutes. Seek medical attention should any irritation develop.
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Inhalation:	Obtain fresh air. Seek medical attention if irritation develops after exposure ends.
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Ingestion:	If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.
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4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- ACUTE HEALTH EFFECTS:**

AREA EXPOSED	EFFECTS
---------------------	----------------

Eye Contact:	May cause eye irritation upon prolonged exposure.
---------------------	---

Skin Contact:	May cause skin irritation upon prolonged exposure.
----------------------	--

Inhalation:	Not anticipated to be a potential route of exposure.
--------------------	--

Ingestion:	Not anticipated to be a potential route of exposure.
-------------------	--

- CHRONIC HEALTH EFFECTS:** None known.

- TARGET ORGANS:** None known.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None known.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other type.
- UNSUITABLE FIRE EXTINGUISHING MEDIA:** None.

5.2 UNUSUAL HAZARDS IN FIRE SITUATIONS

POTENTIAL HAZARD	DESCRIPTION FOR PRODUCT
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Decomposition:	Generates irritating vapors, carbon monoxide, carbon dioxide.
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Incompatibilities:	See Section 10 (Reactivity and Stability).
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Explosion Sensitivity to Mechanical Impact:	Not applicable.
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Explosion Sensitivity to Static Discharge:	Not applicable.
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5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases. Gloves and safety glasses must be worn when cleaning up spills. Use caution during clean-up; contaminated floors and items may be slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material. Subsequently, personnel can follow the instructions for incidental releases.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Use damp sponge or polypad to carefully cleanse contaminated area or items. If appropriate, further clean contaminated area and equipment with soap and water solution, followed by a water rinse.

6.2 ENVIRONMENTAL PRECAUTIONS

- **IN CASE OF SPILL:** Collect spillage promptly. Avoid response actions that can cause a release of a significant amount of substance into the environment. Avoid accidental dispersal of spilled material into soil, waterways, and sewers.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- **SPILL RESPONSE EQUIPMENT:** Polypad or sponge. Appropriate waste container.

6.4 REFERENCE TO OTHER SECTIONS

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- **HYGIENE PRACTICES:** Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of mists, sprays, or aerosols. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.
- **HANDLING PRACTICES:** Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use.

7.2 CONDITIONS FOR SAFE STORAGE

- **STORAGE PRACTICES:** Ensure all containers are correctly labeled. Store containers away from direct sunlight, and sources of intense heat. Store this product away from incompatible chemicals. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Empty containers may contain residual material; therefore, empty containers should be handled with care.
- **INCOMPATIBILITIES:** See Section 10 (Stability and Reactivity).

7.3 SPECIFIC END USES

- This product is for use in protein sequencing processes by trained laboratory personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** No airborne occupational exposure limits have been established.
- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** None established.
- **DERIVED NO EFFECTS LEVEL:** Not established.
- **PREDICTED NO EFFECT CONCENTRATION:** Not established.

8.2 EXPOSURE CONTROLS

- **GENERAL GUIDELINES:** This product is intended for use by trained personnel as part of a kit.

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- **ENGINEERING CONTROLS:** Ensure the area has adequate ventilation to ensure minimal inhalation of mists or sprays occurs. Eye wash stations and safety showers should be readily available.
- **RESPIRATORY PROTECTION:** None needed under normal circumstances of use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

- **HAND PROTECTION:** None typically needed for anticipated use. Neoprene or nitrile gloves are recommended if skin contact can occur (e.g., spill clean-up). Ensure gloves are intact prior to use.
- **EYE PROTECTION:** Safety glasses are recommended if splash or spray can occur during use (e.g., during refilling of unit).
- **BODY PROTECTION:** Body protection suitable to task is recommended (e.g. laboratory coat).
- **OTHER PROTECTIVE MEASURES:** Wash hands during breaks and at the end of handling the material. Immediately remove any contaminated clothing.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

- Minimize the generation of mists, sprays, or aerosols while using this product. Avoid release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE AND DISTINGUISHING CHARACTERISTICS:**

<u>PROPERTY</u>	<u>DATA</u>
State:	Liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	Not determined
pH:	Not determined

- **PHYSICAL DATA:**

<u>PROPERTY</u>	<u>DATA</u>
Melting Point/Freezing Point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined.
Flash Point:	Not determined.
Evaporation Rate (Water = 1):	Not determined
Flammability:	Approximately 1.0
Upper/Lower Explosion Limits	Not applicable.
Vapor Pressure:	Not applicable.
Vapor Density	Not determined
Relative Density at 20 °C (68 °F)	Not determined.
Solubility:	Not determined
Partition Coefficient/n-octanol/water:	Totally soluble in water
Autoignition Temperature:	Not determined
Decomposition Temperature:	Not applicable.
Kinematic Viscosity:	Not determined.
Particle Characteristics:	Not determined.

9.2 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

- **Information regarding Physical Hazard Classes** This product is not classified under any physical hazard class.
- **Other Safety Characteristics** Not applicable

9.3 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

Solvent Content:

- o Water: 97.6%
- o Volatile Organic Compound (VOC) Content: 0.0%

Solid Content: 1.0%:

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY AND CHEMICAL STABILITY

- The product is not reactive under typical conditions of use or handling.
- Normally stable under standard temperatures and pressures.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS (INCLUDING THOSE ASSOCIATED WITH FORESEEABLE EMERGENCY)

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.3 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals and adverse storage conditions.

10.4 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.5 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON ACUTE TOXICITY

- **PRODUCT TOXICOLOGY DATA:** The following are calculated estimates for the product:
 - Acute Toxicity Estimate (Oral) > 5000 mg/kg
 - Acute Toxicity Estimate (Dermal) > 5000 mg/kg
 - Acute Toxicity Estimate (Inhalation) > 5 mg/L (dusts and mists)
- **DEGREE OF IRRITATION:** This product is not anticipated to cause skin or eye irritation.
- **SENSITIZATION:** This product does not contain any compound reported to as a skin or respiratory sensitizer.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazard Information) and Section 4 (First-Aid Measures) for additional details.
 - **Eyes:** May cause eye irritation upon prolonged exposure.
 - **Skin:** May cause skin irritation upon prolonged exposure.
 - **Inhalation** : Not anticipated to be a significant route of occupational exposure.
 - **Ingestion:** Not anticipated to be a significant route of occupational exposure.

11.2 INFORMATION ON CHRONIC TOXICITY

- **CARCINOGENICITY STATUS:** This product is not listed as a carcinogen by NTP, IARC, or OSHA.
- **REPRODUCTIVE TOXICITY INFORMATION:** Not applicable.
- **MUTAGENIC EFFECTS** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD:** Not applicable.

11.3 OTHER USEFUL TOXICOLOGY INFORMATION

- **ENDOCRINE-DISRUPTING PROPERTIES:** Not applicable.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ENVIRONMENTAL TOXICITY

- This product is not anticipated to be harmful to the environment.

12.2 PERSISTENCE AND DEGRADABILITY

- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.

12.3 BIOACCUMULATIVE POTENTIAL

- This product is not anticipated to bioaccumulate significantly.

12.4 MOBILITY IN SOIL

- Based on its total solubility in water, this product is expected to have significant mobility in soil.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

- Not classified as PBT or vPvB.

12.6 ENDOCRINE DISRUPTING PROPERTIES

- None reported.

12.7 OTHER ADVERSE ENVIRONMENTAL EFFECTS

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

- Dispose of in accordance with local, state, and national regulations.

13.2 DISPOSAL CONSIDERATIONS

- **EPA RCRA WASTE CODE:** Not applicable to wastes consisting only of this product.
- **SEWAGE DISPOSAL:** Waste should not be disposed of by release to sewers.

13.3 DISPOSITION OF EMPTY CONTAINERS

- Empty containers may contain residual material; therefore, empty containers should be handled with care.
- Empty containers should be discarded properly.

SECTION 14: TRANSPORT INFORMATION

14.1 HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS

- **IATA DESIGNATION:** Product is not regulated as a dangerous good by the International Air Transport Association.
- **IMO DESIGNATION:** Product is not regulated as a dangerous good by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None known.

14.3 SPECIAL PRECAUTIONS FOR TRANSPORTERS

- None established.

14.4 TRANSPORT IN BULK

- **ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:** Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 OTHER IMPORTANT SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS

- **E.U. REACH:** Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. REACH (1907/2006). Contains no substance with REACH Restrictions.

15.2 EUROPEAN UNION CHEMICAL SAFETY ASSESSMENT

- **ASSESSMENT INFORMATION:** No chemical safety assessment has been conducted.

Additional information related to specific national requirements for other regions is listed in the following sections.

15.3 ARGENTINA: PERTINENT REGULATIONS

- STANDARD IRAM 41400-AR (Chemical Products - Safety Data Sheet): This safety data sheet is prepared in accordance with the requirements of Argentina.
- Carcinogenic Substances and Agents Registry. Not applicable.
- Control of Precursors and Essential Chemicals for the Preparation of Drugs: Not applicable.

15.4 AUSTRALIA: PERTINENT REGULATIONS

- National Code of Practice for the Preparation of Safety Data Sheets [NOHSC:2011(2003)]: This safety data sheet is prepared in accordance with the requirements of Australia.

15.5 BAHRAIN: PERTINENT REGULATIONS

- Resolution No. 4 of 2006 on the Management of Hazardous Chemicals (Articles 1 and 9): This safety data sheet is prepared in accordance with the requirements of Bahrain.

15.6 BRAZIL: PERTINENT REGULATIONS

- ABNT NBR 14725:2023 - Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Brazil.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.7 CHILE: PERTINENT REGULATIONS

- NCh 2245:2021 (Chemical Product Safety Data Sheet - Order and Content of Sections): This safety data sheet is prepared in accordance with the requirements of Chile.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.8 EGYPT: PERTINENT REGULATIONS

- Ministerial Decree No. 610/2020, which mandates the Egyptian Standard ES 8398 (Safety Data Sheet for Chemical Products - Content and Order of Sections). This safety data sheet is prepared in accordance with the requirements of Egypt.

15.9 INDIA: PERTINENT REGULATIONS

- Schedule 9 - The Manufacture, Storage, and Import of Hazardous Chemicals Rule, 1989: This safety data contains all information required under the regulations in India.

15.10 INDONESIA: PERTINENT REGULATIONS

- Decree of Ministry of Industry No.23/M-IND/PER/4/2013: This safety data contains all information required under Indonesian regulations.

15.11 ISRAEL: PERTINENT REGULATIONS

- Israel Standard 2302-1 (2004) - Classification, Packaging, Labeling, and Marking of Dangerous Materials: This safety data contains all information required under the regulations in Israel.

15.12 JAPAN: PERTINENT REGULATIONS

- JIS Z 7253:2019- (Safety Data Sheets for Chemical Products): This safety data contains all information required under the regulations in Japan.
- This product is used for research and development purposes.

15.13 JORDAN: PERTINENT REGULATIONS

- 29 CFR 1910.1200 (US Hazard Communication Standard): This safety data contains all information required under the regulations in Jordan.

15.14 KENYA: PERTINENT REGULATIONS



- Environmental Management and Coordination (Toxic and Hazardous Chemicals and Materials) Regulations. This safety data contains all information required under the regulations in Jordan.

SECTION 15: REGULATORY INFORMATION (Continued)

15.15 **KOSOVO: PERTINENT REGULATIONS**

- Article 24 of the Law on Chemicals. This safety data contains all information required under the regulations in Jordan.

15.16 **MALAYSIA: PERTINENT REGULATIONS**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. This safety data contains all information required under the regulations in Jordan.

15.17 **MEXICO: PERTINENT REGULATIONS**

- NOM-018-STPS-2015] – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Mexico.

15.18 **MOLDOVA: PERTINENT REGULATIONS**

- Government Decision No. 640 of 11-09-2024. This safety data sheet is prepared in accordance with the requirements of Mexico.

15.19 **NEW ZEALAND**

- Hazardous Substances (Safety Data Sheets) Notice 2017, which was amended in 2020. This safety data sheet is prepared in accordance with the requirements of New Zealand.
- New Zealand Inventory of Chemicals (NZIoC): This product is used for research and development purposes.

15.20 **OMAN**

- Ministerial Decision No. 248/97 (Requirements for Safety Data Sheets). This safety data sheet is prepared in accordance with the requirements of Oman.

15.21 **QATAR, SAUDI ARABIA, AND UNITED ARAB EMIRATES: PERTINENT REGULATIONS**

- Gulf Standardization Organization Technical Order 2654:2021 9 – The Global Harmonized System (GHS) in Gulf Cooperation Council (GCC) countries: This safety data sheet is prepared in accordance with the requirements of the Gulf States.

15.22 **SERBIA: PERTINENT REGULATIONS**

- Rulebook on the Contents of the Safety Data Sheet ("Official Gazette of the Republic of Serbia" No. 11/2024): This safety data sheet is prepared in accordance with the requirements of Serbia.

15.23 **SINGAPORE: PERTINENT REGULATIONS**

- Singapore Standard SS 586-3:2022 9 – Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods: This safety data sheet is prepared in accordance with the requirements of Singapore.
- Singapore Ozone-Depleting Substances List: No product component is listed.

15.24 **SOUTH AFRICA: PERTINENT REGULATIONS**

- Regulations for Hazardous Chemical Agents (RHCA) 2021, specifically in Regulation 14A: This safety data sheet is prepared in accordance with the requirements of South Africa.

15.25 **SOUTH KOREA: PERTINENT REGULATIONS**

- Public Notice No. 2016-19 9 – Standards for Classification and/or Labeling of Chemicals and for Materials Safety Data Sheets: This safety data sheet is prepared in accordance with the requirements of South Korea,
- This product is used for research and development purposes.

15.26 **SWITZERLAND: PERTINENT REGULATIONS**

- Chemicals Ordinance (ChemO): This safety data sheet is prepared in accordance with the requirements of Switzerland.
- Youth Employment Protection Ordinance (SR 822.115): Young people in basic vocational education and training may only work with this product if this is provided for in the respective education regulation in order to achieve the training objective, if the requirements of the education plan are fulfilled, and the applicable age restrictions are observed. Young people who are not in basic vocational training may



not work with this product. As young people, employees of both genders are considered up to 18 years of age. Maternity ordinance and Safety Ordinance (SR 822.111.52):

Pregnant women and nursing mothers may only come into contact with this product during their work if it has been established on the basis of a risk assessment in accordance with Art. 63 ArGV 1 that there is no specific health risk to the mother and child or that this can be ruled out by taking suitable protective measures.

SECTION 15: REGULATORY INFORMATION (Continued)

15.27 TAIWAN: PERTINENT REGULATIONS

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861: This safety data sheet is prepared in accordance with the requirements of Taiwan.

15.28 THAILAND: PERTINENT REGULATIONS

- Hazard Classification and Communication System of Hazardous Substances B.E.2555 (2012): This safety data sheet has been prepared in accordance with Thai requirements.

15.29 TURKEY: PERTINENT REGULATIONS

- Annex 2 Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması" (KKDIK/Registration, Evaluation, Authorization and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of Turkey.

15.30 UNITED KINGDOM: PERTINENT REGULATIONS

- UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of the United Kingdom.

15.31 VIETNAM: PERTINENT REGULATIONS

- Circular No. 04/2012/TT-BCT and Decree No. 113/2017/ND-CP (Law on Chemicals 2007): This safety data sheet has been prepared in accordance with the requirements of Vietnam.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- DATE OF PREPARATION:** August 18, 2025
- SUPERCEDES:** Not applicable.
- CHANGE INDICATED:** New product.

16.2 DEFINITIONS

SECTION **EXPLANATION OF TERMS/ABBREVIATIONS**

ALL	EU: European Union. CLP: Union Classification, Labelling, and Packaging of Substances and Mixtures
3	CAS Number: Chemical Abstract Service Number, used by the American Chemical Society to uniquely identify a chemical.
8	OEL: Occupational Exposure Limit. ppm: Parts per Million. mg/m³: Milligrams per cubic meter.
9	pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, a pH value of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
11	CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designated route of administration.
12	EC50: Effect Concentration. PBT or vPvB: Persistent/ Bioaccumulative /Toxic; Very Persistent/ Very Bioaccumulative
15	REACH: European Union regulation concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances

SAFETY DATA SHEET

This document is in compliance with requirements for Safety Data Sheets implemented under the European Union regulation on the Classification, Labelling, and Packaging of Substances and Mixtures (EC No. 1272/2008, EU 2020/878; EU 2024/2865) and the standard of other nations. See section 16 for more information on the national regulations pertinent to this documentation.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

- **PRODUCT NAME:** AP MIX 4
- **PRODUCT CODE:** 806-00088-00

1.2 PRODUCT USE AND RESTRICTIONS

- **IDENTIFIED USE:** Kit component for protein sequencing process.
- **USES ADVISED AGAINST:** Procedures not related to the intended use of this product.
- **IDENTIFIED USERS:** For sale to, use, and storage by personnel trained in handling product safely.

1.3 MANUFACTURER INFORMATION

- **MANUFACTURER/SUPPLIER:** Quantum SI, Inc.
- **ADDRESS:** 29 Business Park Dr., Suite C; Branford, CT; 06405
- **BUSINESS PHONE:** 866-688-7374 (8:00 am to 5:00 pm, Eastern Standard Time)
- **EMERGENCY PHONE:** +1- Chemtrec (US and Canada): +1-800-424-9300
Outside US): +1-703- 527-3887
- **Email:** support@quantum-si.com

SECTION 2: HAZARD IDENTIFICATION

2.1 HAZARD CLASSIFICATION (EU CLP)

- Not classified as hazardous under pertinent national standards.

2.2 LABEL ELEMENTS (EU CLP)

- **Hazard Pictograms:** Not applicable.
- **Signal Word:** Not applicable.
- **Hazard Statements:** Not applicable.
- **Precautionary Statements:** Not applicable.

2.3 OTHER PERTINENT DATA ON HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS

- **Contains no material classified as follows:** Endocrine disrupting properties: In relation to human health and in relation to the environment (ED). Persistent, Bioaccumulative and Toxic (PBT); Very persistent and very bioaccumulative (vPvB); Persistent, mobile and toxic (PMT)' Very persistent and very mobile (vPvM).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 IDENTIFICATION OF HAZARDOUS SUBSTANCES IN PRODUCT

NAME	CAS NUMBER	GHS CLASSIFICATION COMPONENT	HAZARD FOR	% (w/w)
The components of this product are not hazardous or are below cut-off concentrations (and do not contribute physical or health hazards at the concentrations present in solution).				100%

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- BASIC FIRST AID BY EXPOSURE ROUTE:**

AREA EXPOSED	TREATMENT
---------------------	------------------

Eye Contact:	Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention should any irritation develop.
---------------------	---

Skin Contact:	Flush area with warm, running water for several minutes. Seek medical attention should any irritation develop.
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Inhalation:	Obtain fresh air. Seek medical attention if irritation develops after exposure ends.
--------------------	--

Ingestion:	If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.
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4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- ACUTE HEALTH EFFECTS:**

AREA EXPOSED	EFFECTS
---------------------	----------------

Eye Contact:	May cause eye irritation upon prolonged exposure.
---------------------	---

Skin Contact:	May cause skin irritation upon prolonged exposure.
----------------------	--

Inhalation:	Not anticipated to be a potential route of exposure.
--------------------	--

Ingestion:	Not anticipated to be a potential route of exposure.
-------------------	--

- CHRONIC HEALTH EFFECTS:** None known.

- TARGET ORGANS:** None known.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None known.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other type.
- UNSUITABLE FIRE EXTINGUISHING MEDIA:** None.

5.2 UNUSUAL HAZARDS IN FIRE SITUATIONS

POTENTIAL HAZARD	DESCRIPTION FOR PRODUCT
-------------------------	--------------------------------

Decomposition:	Generates irritating vapors, carbon monoxide, carbon dioxide.
-----------------------	---

Incompatibilities:	See Section 10 (Reactivity and Stability).
---------------------------	--

Explosion Sensitivity to Mechanical Impact:	Not applicable.
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Explosion Sensitivity to Static Discharge:	Not applicable.
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5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases. Gloves and safety glasses must be worn when cleaning up spills. Use caution during clean-up; contaminated floors and items may be slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material. Subsequently, personnel can follow the instructions for incidental releases.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Use damp sponge or polypad to carefully cleanse contaminated area or items. If appropriate, further clean contaminated area and equipment with soap and water solution, followed by a water rinse.

6.2 ENVIRONMENTAL PRECAUTIONS

- **IN CASE OF SPILL:** Collect spillage promptly. Avoid response actions that can cause a release of a significant amount of substance into the environment. Avoid accidental dispersal of spilled material into soil, waterways, and sewers.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- **SPILL RESPONSE EQUIPMENT:** Polypad or sponge. Appropriate waste container.

6.4 REFERENCE TO OTHER SECTIONS

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- **HYGIENE PRACTICES:** Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of mists, sprays, or aerosols. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.
- **HANDLING PRACTICES:** Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use.

7.2 CONDITIONS FOR SAFE STORAGE

- **STORAGE PRACTICES:** Ensure all containers are correctly labeled. Store containers away from direct sunlight, and sources of intense heat. Store this product away from incompatible chemicals. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Empty containers may contain residual material; therefore, empty containers should be handled with care.
- **INCOMPATIBILITIES:** See Section 10 (Stability and Reactivity).

7.3 SPECIFIC END USES

- This product is for use in protein sequencing processes by trained laboratory personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** No airborne occupational exposure limits have been established.
- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** None established.
- **DERIVED NO EFFECTS LEVEL:** Not established.
- **PREDICTED NO EFFECT CONCENTRATION:** Not established.

8.2 EXPOSURE CONTROLS

- **GENERAL GUIDELINES:** This product is intended for use by trained personnel as part of a kit.



- **ENGINEERING CONTROLS:** Ensure the area has adequate ventilation to ensure minimal inhalation of mists or sprays occurs. Eye wash stations and safety showers should be readily available.
- **RESPIRATORY PROTECTION:** None needed under normal circumstances of use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

- **HAND PROTECTION:** None typically needed for anticipated use. Neoprene or nitrile gloves are recommended if skin contact can occur (e.g., spill clean-up). Ensure gloves are intact prior to use.
- **EYE PROTECTION:** Safety glasses are recommended if splash or spray can occur during use (e.g., during refilling of unit).
- **BODY PROTECTION:** Body protection suitable to task is recommended (e.g., laboratory coat).
- **OTHER PROTECTIVE MEASURES:** Wash hands during breaks and at the end of handling the material. Immediately remove any contaminated clothing.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

- Minimize the generation of mists, sprays, or aerosols while using this product. Avoid release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE AND DISTINGUISHING CHARACTERISTICS:**

<u>PROPERTY</u>	<u>DATA</u>
State:	Liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	Not determined
pH:	7.5.

- **PHYSICAL DATA:**

<u>PROPERTY</u>	<u>DATA</u>
Melting Point/Freezing Point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined.
Flash Point:	≥100 °C (≥212 °F)
Evaporation Rate (Water = 1):	Approximately 1.0
Flammability:	Not applicable.
Upper/Lower Explosion Limits	Not applicable.
Vapor Pressure:	@ 20C (68F) ≤23 hPa (≤17.3 mm Hg).
Vapor Density	Not determined.
Relative Density at 20 °C (68 °F)	1 g/cm ³ (8.345 lb./gal)
Solubility:	Totally soluble in water
Partition Coefficient/n-octanol/water:	Not determined
Autoignition Temperature:	Not applicable.
Decomposition Temperature:	Not determined.
Kinematic Viscosity:	Not determined.
Particle Characteristics:	Not applicable.

9.2 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

- **Information regarding Physical Hazard Classes** This product is not classified under any physical hazard class.
- **Other Safety Characteristics** Not applicable

9.3 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

Solvent Content:

- o Water: 97.6%
- o Volatile Organic Compound (VOC) Content: 0.0%

Solid Content: 1.0%:

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY AND CHEMICAL STABILITY

- The product is not reactive under typical conditions of use or handling.
- Normally stable under standard temperatures and pressures.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS (INCLUDING THOSE ASSOCIATED WITH FORESEEABLE EMERGENCY)

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.3 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals and adverse storage conditions.

10.4 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.5 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon oxides, carbon monoxide, carbon dioxide, and compounds of sodium, nitrogen, and chlorine.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON ACUTE TOXICITY

- **PRODUCT TOXICOLOGY DATA:** The following are calculated estimates for the product:
 - Acute Toxicity Estimate (Oral) > 5000 mg//kg
 - Acute Toxicity Estimate (Dermal) > 5000 mg//kg
 - Acute Toxicity Estimate (Inhalation) > 5 mg/L (dusts and mists)
- **DEGREE OF IRRITATION:** This product is not anticipated to cause skin or eye irritation.
- **SENSITIZATION:** This product does not contain any compound reported to as a skin or respiratory sensitizer.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazard Information) and Section 4 (First-Aid Measures) for additional details.
 - **Eyes:** May cause eye irritation upon prolonged exposure.
 - **Skin:** May cause skin irritation upon prolonged exposure.
 - **Inhalation** : Not anticipated to be a significant route of occupational exposure.
 - **Ingestion:** Not anticipated to be a significant route of occupational exposure.

11.2 INFORMATION ON CHRONIC TOXICITY

- **CARCINOGENICITY STATUS:** This product is not listed as a carcinogen by NTP, IARC, or OSHA.
- **REPRODUCTIVE TOXICITY INFORMATION:** Not applicable.
- **MUTAGENIC EFFECTS** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD:** Not applicable.

11.3 OTHER USEFUL TOXICOLOGY INFORMATION

- **ENDOCRINE-DISRUPTING PROPERTIES:** Not applicable.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ENVIRONMENTAL TOXICITY

- This product is not anticipated to be harmful to the environment.

12.2 PERSISTENCE AND DEGRADABILITY



- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.

SECTION 12: ECOLOGICAL INFORMATION (Continued)

12.3 **BIOACCUMULATIVE POTENTIAL**

- This product is not anticipated to bioaccumulate significantly.

12.4 **MOBILITY IN SOIL**

- Based on its total solubility in water, this product is expected to have significant mobility in soil.

12.5 **RESULTS OF PBT AND vPvB ASSESSMENT**

- Not classified as PBT or vPvB.

12.6 **ENDOCRINE DISRUPTING PROPERTIES**

- None reported.

12.7 **OTHER ADVERSE ENVIRONMENTAL EFFECTS**

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 **WASTE TREATMENT METHODS**

- Dispose of in accordance with local, state, and national regulations.

13.2 **DISPOSAL CONSIDERATIONS**

- **EPA RCRA WASTE CODE:** Not applicable to wastes consisting only of this product.
- **SEWAGE DISPOSAL:** Waste should not be disposed of by release to sewers.

13.3 **DISPOSITION OF EMPTY CONTAINERS**

- Empty containers may contain residual material; therefore, empty containers should be handled with care.
- Empty containers should be discarded properly.

SECTION 14: TRANSPORT INFORMATION

14.1 **HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS**

- **IATA DESIGNATION:** Product is not regulated as a dangerous good by the International Air Transport Association.
- **IMO DESIGNATION:** Product is not regulated as a dangerous good by the International Maritime Organization.

14.2 **ENVIRONMENTAL HAZARDS**

- None known.

14.3 **SPECIAL PRECAUTIONS FOR TRANSPORTERS**

- None established.

14.4 **TRANSPORT IN BULK**

- **ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:** Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 **OTHER IMPORTANT SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS**

- **E.U. REACH:** Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. REACH (1907/2006). Contains no substance with REACH Restrictions.

15.2 **EUROPEAN UNION CHEMICAL SAFETY ASSESSMENT**

- **ASSESSMENT INFORMATION:** No chemical safety assessment has been conducted.

Additional information related to specific national requirements for other regions is listed in the following sections.

15.3 **ARGENTINA: PERTINENT REGULATIONS**

- STANDARD IRAM 41400-AR (Chemical Products - Safety Data Sheet): This safety data sheet is prepared in accordance with the requirements of Argentina.
- Carcinogenic Substances and Agents Registry. Not applicable.
- Control of Precursors and Essential Chemicals for the Preparation of Drugs: Not applicable.

15.4 **AUSTRALIA: PERTINENT REGULATIONS**

- National Code of Practice for the Preparation of Safety Data Sheets [NOHSC:2011(2003)]: This safety data sheet is prepared in accordance with the requirements of Australia.

15.5 **BAHRAIN: PERTINENT REGULATIONS**

- Resolution No. 4 of 2006 on the Management of Hazardous Chemicals (Articles 1 and 9): This safety data sheet is prepared in accordance with the requirements of Bahrain.

15.6 **BRAZIL: PERTINENT REGULATIONS**

- ABNT NBR 14725:2023 - Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Brazil.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.7 **CHILE: PERTINENT REGULATIONS**

- NCh 2245:2021 (Chemical Product Safety Data Sheet - Order and Content of Sections): This safety data sheet is prepared in accordance with the requirements of Chile.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.8 **EGYPT: PERTINENT REGULATIONS**

- Ministerial Decree No. 610/2020, which mandates the Egyptian Standard ES 8398 (Safety Data Sheet for Chemical Products - Content and Order of Sections). This safety data sheet is prepared in accordance with the requirements of Egypt.

15.9 **INDIA: PERTINENT REGULATIONS**

- Schedule 9 - The Manufacture, Storage, and Import of Hazardous Chemicals Rule, 1989: This safety data contains all information required under the regulations in India.

15.10 **INDONESIA: PERTINENT REGULATIONS**

- Decree of Ministry of Industry No.23/M-IND/PER/4/2013: This safety data contains all information required under Indonesian regulations.

15.11 **ISRAEL: PERTINENT REGULATIONS**

- Israel Standard 2302-1 (2004) - Classification, Packaging, Labeling, and Marking of Dangerous Materials: This safety data contains all information required under the regulations in Israel.

15.12 **JAPAN: PERTINENT REGULATIONS**

- JIS Z 7253:2019- (Safety Data Sheets for Chemical Products): This safety data contains all information required under the regulations in Japan.
- This product is used for research and development purposes.

15.13 **JORDAN: PERTINENT REGULATIONS**

- 29 CFR 1910.1200 (US Hazard Communication Standard): This safety data contains all information required under the regulations in Jordan.

15.14 **KENYA: PERTINENT REGULATIONS**



- Environmental Management and Coordination (Toxic and Hazardous Chemicals and Materials) Regulations. This safety data contains all information required under the regulations in Jordan.

SECTION 15: REGULATORY INFORMATION (Continued)

15.15 **KOSOVO: PERTINENT REGULATIONS**

- Article 24 of the Law on Chemicals. This safety data contains all information required under the regulations in Jordan.

15.16 **MALAYSIA: PERTINENT REGULATIONS**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. This safety data contains all information required under the regulations in Jordan.

15.17 **MEXICO: PERTINENT REGULATIONS**

- NOM-018-STPS-2015] – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Mexico.

15.18 **MOLDOVA: PERTINENT REGULATIONS**

- Government Decision No. 640 of 11-09-2024. This safety data sheet is prepared in accordance with the requirements of Mexico.

15.19 **NEW ZEALAND**

- Hazardous Substances (Safety Data Sheets) Notice 2017, which was amended in 2020. This safety data sheet is prepared in accordance with the requirements of New Zealand.
- New Zealand Inventory of Chemicals (NZIoC): This product is used for research and development purposes.

15.20 **OMAN**

- Ministerial Decision No. 248/97 (Requirements for Safety Data Sheets). This safety data sheet is prepared in accordance with the requirements of Oman.

15.21 **QATAR, SAUDI ARABIA, AND UNITED ARAB EMIRATES: PERTINENT REGULATIONS**

- Gulf Standardization Organization Technical Order 2654:2021 9 – The Global Harmonized System (GHS) in Gulf Cooperation Council (GCC) countries: This safety data sheet is prepared in accordance with the requirements of the Gulf States.

15.22 **SERBIA: PERTINENT REGULATIONS**

- Rulebook on the Contents of the Safety Data Sheet ("Official Gazette of the Republic of Serbia" No. 11/2024): This safety data sheet is prepared in accordance with the requirements of Serbia.

15.23 **SINGAPORE: PERTINENT REGULATIONS**

- Singapore Standard SS 586-3:2022 9 – Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods: This safety data sheet is prepared in accordance with the requirements of Singapore.
- Singapore Ozone-Depleting Substances List: No product component is listed.

15.24 **SOUTH AFRICA: PERTINENT REGULATIONS**

- Regulations for Hazardous Chemical Agents (RHCA) 2021, specifically in Regulation 14A: This safety data sheet is prepared in accordance with the requirements of South Africa.

15.25 **SOUTH KOREA: PERTINENT REGULATIONS**

- Public Notice No. 2016-19 9 – Standards for Classification and/or Labeling of Chemicals and for Materials Safety Data Sheets: This safety data sheet is prepared in accordance with the requirements of South Korea,
- This product is used for research and development purposes.

15.26 **SWITZERLAND: PERTINENT REGULATIONS**

- Chemicals Ordinance (ChemO): This safety data sheet is prepared in accordance with the requirements of Switzerland.
- Youth Employment Protection Ordinance (SR 822.115): Young people in basic vocational education and training may only work with this product if this is provided for in the respective education regulation in order to achieve the training objective, if the requirements of the education plan are fulfilled, and the applicable age restrictions are observed. Young people who are not in basic vocational training may



not work with this product. As young people, employees of both genders are considered up to 18 years of age. Maternity ordinance and Safety Ordinance (SR 822.111.52):

Pregnant women and nursing mothers may only come into contact with this product during their work if it has been established on the basis of a risk assessment in accordance with Art. 63 ArGV 1 that there is no specific health risk to the mother and child or that this can be ruled out by taking suitable protective measures.

SECTION 15: REGULATORY INFORMATION (Continued)

15.27 TAIWAN: PERTINENT REGULATIONS

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861: This safety data sheet is prepared in accordance with the requirements of Taiwan.

15.28 THAILAND: PERTINENT REGULATIONS

- Hazard Classification and Communication System of Hazardous Substances B.E.2555 (2012): This safety data sheet has been prepared in accordance with Thai requirements.

15.29 TURKEY: PERTINENT REGULATIONS

- Annex 2 Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması" (KKDIK/Registration, Evaluation, Authorization and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of Turkey.

15.30 UNITED KINGDOM: PERTINENT REGULATIONS

- UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of the United Kingdom.

15.31 VIETNAM: PERTINENT REGULATIONS

- Circular No. 04/2012/TT-BCT and Decree No. 113/2017/ND-CP (Law on Chemicals 2007): This safety data sheet has been prepared in accordance with the requirements of Vietnam.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- DATE OF PREPARATION:** August 18, 2025
- SUPERCEDES:** Not applicable.
- CHANGE INDICATED:** New product.

16.2 DEFINITIONS

SECTION **EXPLANATION OF TERMS/ABBREVIATIONS**

ALL	EU: European Union. CLP: Union Classification, Labelling, and Packaging of Substances and Mixtures
3	CAS Number: Chemical Abstract Service Number, used by the American Chemical Society to uniquely identify a chemical.
8	OEL: Occupational Exposure Limit. ppm: Parts per Million. mg/m³: Milligrams per cubic meter.
9	pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, a pH value of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
11	CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designated route of administration.
12	EC50: Effect Concentration. PBT or vPvB: Persistent/ Bioaccumulative /Toxic; Very Persistent/ Very Bioaccumulative
15	REACH: European Union regulation concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances

SAFETY DATA SHEET

This document is in compliance with requirements for Safety Data Sheets implemented under the European Union regulation on the Classification, Labelling, and Packaging of Substances and Mixtures (EC No. 1272/2008, EU 2020/878; , EU 2024/2865) and the standard of other nations. See section 16 for more information on the national regulations pertinent to this documentation.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

- **PRODUCT NAME: QUENCHER**
- **PRODUCT CODE: 806-00071-00**

1.2 PRODUCT USE AND RESTRICTIONS

- **IDENTIFIED USE:** Kit component for protein sequencing process.
- **USES ADVISED AGAINST:** Procedures not related to the intended use of this product.
- **IDENTIFIED USERS:** For sale to, use, and storage by personnel trained in handling product safely.

1.3 MANUFACTURER INFORMATION

- **MANUFACTURER/SUPPLIER: Quantum SI, Inc.**
- **ADDRESS:** 29 Business Park Dr., Suite C; Branford, CT; 06405
- **BUSINESS PHONE:** 866-688-7374 (8:00 am to 5:00 pm, Eastern Standard Time)
- **EMERGENCY PHONE:** +1- Chemtrec (US and Canada): +1-800-424-9300
Outside US): +1-703- 527-3887
- **Email:** support@quantum-si.com

SECTION 2: HAZARD IDENTIFICATION

2.1 HAZARD CLASSIFICATION (EU CLP)

- Eye irritation (Category 2A), Skin Sensitization (Category 1)

2.2 LABEL ELEMENTS (EU CLP)

- **Hazard Pictograms:**



- **Signal Word:** Warning.
- **Hazard Statements:** H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.
- **Precautionary Statements:** P280: Wear protective gloves/protective clothing/eye protection/face protection P302 + P352: IF ON SKIN: Wash with plenty of soap and water P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313: If eye irritation persists: Get medical advice/attention.

2.3 OTHER PERTINENT DATA ON HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS

- **Contains no material classified as follows:** Endocrine disrupting properties: In relation to human health and in relation to the environment (ED). Persistent, Bioaccumulative and Toxic (PBT); Very persistent and very bioaccumulative (vPvB); Persistent, mobile, and toxic (PMT)' Very persistent and very mobile (vPvM).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3. IDENTIFICATION OF HAZARDOUS SUBSTANCES IN PRODUCT

1

NAME	CAS NUMBER	GHS HAZARD COMPONENT	CLASSIFICATION FOR	% (w/w) ¹
Sodium Pyruvate	113-24-6	Eye irritation (Category 2A), Skin Sensitization (Category 1)		7-13%

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

• BASIC FIRST AID BY EXPOSURE ROUTE:

AREA EXPOSED TREATMENT

Eye Contact: Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention should any irritation develop.

Skin Contact: Flush area with warm, running water for several minutes. Seek medical attention should any irritation or rash develop.

Inhalation: Obtain fresh air. Seek medical attention if irritation develops after exposure ends.

Ingestion: If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

• ACUTE HEALTH EFFECTS:

AREA EXPOSED EFFECTS

Eye Contact: Causes serious eye irritation.

Skin Contact: May cause skin irritation or allergic skin reactions.

Inhalation: Not anticipated to be a potential route of exposure.

Ingestion: Not anticipated to be a potential route of exposure.

- **CHRONIC HEALTH EFFECTS:** Prolonged or repeated skin contact may cause allergic reactions (e.g., rash, redness).

- **TARGET ORGANS:** Skin, eyes.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- **GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- **RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- **MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None known.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- **RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other type.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** None.

5.2 UNUSUAL HAZARDS IN FIRE SITUATIONS

POTENTIAL HAZARD

Decomposition:

Incompatibilities:

DESCRIPTION FOR PRODUCT

Generates irritating vapors, carbon monoxide, carbon dioxide, and sodium compounds.

See Section 10 (Reactivity and Stability).

¹ The exact composition is a trade secret. All required hazard and safety information has been provided for the products, per the regulations.



Explosion Sensitivity to Mechanical Impact: Not applicable.
Explosion Sensitivity to Static Discharge: Not applicable.

SECTION 5: FIREFIGHTING MEASURES (Continued)

5.3 **ADVICE FOR FIREFIGHTERS**

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES**

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases. Gloves and safety glasses must be worn when cleaning up spills. Use caution during clean-up; contaminated floors and items may be slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material. Subsequently, personnel can follow the instructions for incidental releases.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Use damp sponge or polypad to carefully cleanse contaminated area or items. If appropriate, further clean contaminated area and equipment with soap and water solution, followed by a water rinse.

6.2 **ENVIRONMENTAL PRECAUTIONS**

- **IN CASE OF SPILL:** Collect spillage promptly. Avoid response actions that can cause a release of a significant amount of substance into the environment. Avoid accidental dispersal of spilled material into soil, waterways, and sewers.

6.3 **METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP**

- **SPILL RESPONSE EQUIPMENT:** Polypad or sponge. Appropriate waste container.

6.4 **REFERENCE TO OTHER SECTIONS**

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 **PRECAUTIONS FOR SAFE HANDLING**

- **HYGIENE PRACTICES:** Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of mists, sprays, or aerosols. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.
- **HANDLING PRACTICES:** Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use.

7.2 **CONDITIONS FOR SAFE STORAGE**

- **STORAGE PRACTICES:** Ensure all containers are correctly labeled. Store containers away from direct sunlight, and sources of intense heat. Store this product away from incompatible chemicals. Inspect all incoming containers before storage to ensure that containers are properly labeled and not damaged. Empty containers may contain residual material; therefore, empty containers should be handled with care.
- **INCOMPATIBILITIES:** See Section 10 (Stability and Reactivity).

7.3 **SPECIFIC END USES**

- This product is for use in protein sequencing processes by trained laboratory personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** No occupational airborne exposure levels have been established.
- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** None established.
- **DERIVED NO EFFECTS LEVEL:** The following DNELs have been established for the components of this product.
 - **SODIUM PYRUVATE:** Oral, long-term, systemic effects (general population):1,573mg/kg; Dermal, long-term, systemic effects (worker): 3,146mg/kg; Dermal, long-term, systemic effects (general population):1,573mg/kg; Inhalative, long-term, systemic effects (worker): 3,952mg/m³; Inhalative, long-term, systemic effects (general population):983mg/m³
- **PREDICTED NO EFFECT CONCENTRATION:** The following PNECs have been established for the components of this product:
 - **SODIUM PYRUVATE:** 0.019mg/L for freshwater and 0.0019mg/L for marine water.

8.2 EXPOSURE CONTROLS

- **GENERAL GUIDELINES:** This product is intended for use by trained personnel as part of a kit.
- **ENGINEERING CONTROLS:** Ensure the area has adequate ventilation to ensure minimal inhalation of mists or sprays occurs. Eye wash stations and safety showers should be readily available.
- **RESPIRATORY PROTECTION:** None needed under normal circumstances of use.
- **HAND PROTECTION:** None typically needed for anticipated use. Neoprene or nitrile gloves are recommended if skin contact can occur (e.g., spill clean-up). Ensure gloves are intact prior to use.
- **EYE PROTECTION:** Safety glasses are recommended if splash or spray can occur during use (e.g., during refilling of unit).
- **BODY PROTECTION:** Body protection suitable to task is recommended (e.g., laboratory coat).
- **OTHER PROTECTIVE MEASURES:** Wash hands during breaks and at the end of handling the material. Immediately remove any contaminated clothing.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

- Minimize the generation of mists, sprays, or aerosols while using this product. Avoid release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE AND DISTINGUISHING CHARACTERISTICS:**

<u>PROPERTY</u>	<u>DATA</u>
State:	Liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	Not determined
pH:	Not determined
- **PHYSICAL DATA:**

<u>PROPERTY</u>	<u>DATA</u>
Melting Point/Freezing Point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined.
Flash Point:	≥100 °C (≥212 °F)
Evaporation Rate (Water = 1):	Approximately 1.0
Flammability:	Not applicable.
Upper/Lower Explosion Limits	Not applicable.
Vapor Pressure:	@ 20C (68F) ≤23 hPa (≤17.3 mm Hg).
Vapor Density	Not determined.
Relative Density at 20 °C (68 °F)	Not determined.
Solubility:	Totally soluble in water

Partition Coefficient/n-octanol/water:	Not determined
Autoignition Temperature:	Not applicable.
Decomposition Temperature:	Not determined.
Kinematic Viscosity:	Not determined.
Particle Characteristics:	Not applicable.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Continued)

9.2 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

- **Information regarding Physical Hazard Classes** This product is not classified under any physical hazard class.
- **Other Safety Characteristics**
- **Solvent Content:**
 - o Volatile Organic Compound (VOC) Content: 0.0%

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY AND CHEMICAL STABILITY

- The product is not reactive under typical conditions of use or handling.
- Normally stable under standard temperatures and pressures.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS (INCLUDING THOSE ASSOCIATED WITH FORESEEABLE EMERGENCY)

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.3 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals and adverse storage conditions.

10.4 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.5 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon monoxide, carbon dioxide, and sodium compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON ACUTE TOXICITY

- **PRODUCT TOXICOLOGY DATA:** The following are calculated estimates for the product:
 - o Acute Toxicity Estimate (Oral) > 5000 mg//kg
 - o Acute Toxicity Estimate (Dermal) > 5000 mg//kg
 - o Acute Toxicity Estimate (Inhalation) > 5 mg/L (dusts and mists)
- **COMPONENT TOXICOLOGY DATA:** The following data are available for components of this product:

SODIUM PYRUVATE:

LD50 (oral, rat) = 5,600mg/kg

- **DEGREE OF IRRITATION:** This product is not anticipated to cause skin or eye irritation.
- **SENSITIZATION:** This product contains a skin sensitizer. Prolonged or repeated contact can cause allergic skin reactions.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazard Information) and Section 4 (First-Aid Measures) for additional details.
 - o **Eyes:** Causes serious eye irritation.
 - o **Skin:** May cause skin irritation or allergic skin reactions.
 - o **Inhalation** : Not anticipated to be a significant route of occupational exposure.
 - o **Ingestion:** Not anticipated to be a significant route of occupational exposure.

11.2 INFORMATION ON CHRONIC TOXICITY

- **CARCINOGENICITY STATUS:** This product is not listed as a carcinogen by NTP, IARC, or OSHA.
- **REPRODUCTIVE TOXICITY INFORMATION:** Not applicable.
- **MUTAGENIC EFFECTS** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD:** Not applicable.

SECTION 11: TOXICOLOGICAL INFORMATION (Continued)

11.3 OTHER USEFUL TOXICOLOGY INFORMATION

- **ENDOCRINE-DISRUPTING PROPERTIES:** Not applicable.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ENVIRONMENTAL TOXICITY

- The following aquatic toxicity data is available for the components of this product.

SODIUM PYRUVATE:

Toxicity to aquatic invertebrates (*Daphnia magna*): EC50 (48h): >100mg/l)

Toxicity to algae/aquatic plants (*Raphidocelis subcapitata*, freshwater green alga): ErC50 (72h): >3.02mg/l (growth inhibition)

12.2 PERSISTENCE AND DEGRADABILITY

- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.
- Sodium Pyruvate, a component of this product, is readily biodegradable: 81.6% in 28 days.

12.3 BIOACCUMULATIVE POTENTIAL

- This product is not anticipated to bioaccumulate significantly.

12.4 MOBILITY IN SOIL

- Based on its total solubility in water, this product is expected to have significant mobility in soil.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

- Not classified as PBT or vPvB.

12.6 ENDOCRINE DISRUPTING PROPERTIES

- None reported.

12.7 OTHER ADVERSE ENVIRONMENTAL EFFECTS

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

- Dispose of in accordance with local, state, and national regulations.

13.2 DISPOSAL CONSIDERATIONS

- **EPA RCRA WASTE CODE:** Not applicable to wastes consisting only of this product.
- **SEWAGE DISPOSAL:** Waste should not be disposed of by release to sewers.

13.3 DISPOSITION OF EMPTY CONTAINERS

- Empty containers may contain residual material; therefore, empty containers should be handled with care.
- Empty containers should be discarded properly.

SECTION 14: TRANSPORT INFORMATION

14.1 HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS

- **DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS SHIPPING REGULATIONS:**

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Label	North American Emergency Response Guide #	Marine Pollutant Status
NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION						

- **CANADIAN TRANSPORTATION INFORMATION:** This product is not regulated by Transport Canada as a dangerous good.
- **EUROPEAN TRANSPORT CLASSIFICATION BY ROAD (ADR)/RAIL (RID):** Product is not regulated as a dangerous good.
- **IATA DESIGNATION:** Product is not regulated as a dangerous good by the International Air Transport Association.
- **IMO DESIGNATION:** Product is not regulated as a dangerous good by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None known.

14.3 SPECIAL PRECAUTIONS FOR TRANSPORTERS

- None established.

14.4 TRANSPORT IN BULK

- **ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:** Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 EUROPEAN UNION HEALTH AND SAFETY REGULATIONS

- **E.U. REACH:** Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. REACH (1907/2006). Contains no substance with REACH Restrictions.

15.2 EUROPEAN UNION CHEMICAL SAFETY ASSESSMENT

- **ASSESSMENT INFORMATION:** No chemical safety assessment has been conducted.

Additional information related to specific national requirements for other regions is listed in the following sections.

15.3 ARGENTINA: PERTINENT REGULATIONS

- **STANDARD IRAM 41400-AR (Chemical Products - Safety Data Sheet):** This safety data sheet is prepared in accordance with the requirements of Argentina.
- **Carcinogenic Substances and Agents Registry.** Not applicable.
- **Control of Precursors and Essential Chemicals for the Preparation of Drugs:** Not applicable.

15.4 AUSTRALIA: PERTINENT REGULATIONS

- **National Code of Practice for the Preparation of Safety Data Sheets [NOHSC:2011(2003)]:** This safety data sheet is prepared in accordance with the requirements of Australia.
- **Australian Inventory of Industrial Chemicals (AIIC):** Sodium Pyruvate is listed.

15.5 BAHRAIN: PERTINENT REGULATIONS

- **Resolution No. 4 of 2006 on the Management of Hazardous Chemicals (Articles 1 and 9):** This safety data sheet is prepared in accordance with the requirements of Bahrain.

SECTION 15: REGULATORY INFORMATION (Continued)

15.6 **BRAZIL: PERTINENT REGULATIONS**

- ABNT NBR 14725:2023 – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Brazil.
- National List of Carcinogenic Agents for Humans - (LINACH): Not applicable.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.7 **CHILE: PERTINENT REGULATIONS**

- NCh 2245:2021 (Chemical Product Safety Data Sheet – Order and Content of Sections): This safety data sheet is prepared in accordance with the requirements of Chile.
- Chilean Chemical Inventory established under Decree 57/2019: 2-Chloroacetamide is listed.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.8 **EGYPT: PERTINENT REGULATIONS**

- Ministerial Decree No. 610/2020, which mandates the Egyptian Standard ES 8398 (Safety Data Sheet for Chemical Products — Content and Order of Sections). This safety data sheet is prepared in accordance with the requirements of Egypt.
- Hazardous Substances List: Sodium Pyruvate is listed.

15.9 **INDIA: PERTINENT REGULATIONS**

- Schedule 9 – The Manufacture, Storage, and Import of Hazardous Chemicals Rule, 1989: This safety data contains all information required under the regulations in India.
- List of Hazardous and Toxic Chemicals: Sodium Pyruvate is listed.

15.10 **INDONESIA: PERTINENT REGULATIONS**

- Decree of Ministry of Industry No.23/M-IND/PER/4/2013: This safety data contains all information required under the regulations in Indonesia.
- List of Usable Hazardous and Toxic Substances: Sodium Pyruvate is listed.

15.11 **ISRAEL: PERTINENT REGULATIONS**

- Israel Standard 2302-1 (2004) – Classification, Packaging, Labeling, and Marking of Dangerous Materials: This safety data contains all information required under the regulations in Israel.

15.12 **JAPAN: PERTINENT REGULATIONS**

- JIS Z 7253:2019– (Safety Data Sheets for Chemical Products): This safety data contains all information required under the regulations in Japan.
- Japanese Existing and New Chemical Substances Inventory (ENCS): Sodium Pyruvate is listed on the ENCS with METI numbers 2-1148 and 2-2642.
- Industrial Safety and Health Law (ISHL) Inventory: Sodium Pyruvate is listed on the ISHL inventory.

15.13 **JORDAN: PERTINENT REGULATIONS**

- 29 CFR 1910.1200 (US Hazard Communication Standard): This safety data contains all information required under the regulations in Jordan.

15.14 **KENYA: PERTINENT REGULATIONS**

- Environmental Management and Coordination (Toxic and Hazardous Chemicals and Materials) Regulations. This safety data contains all information required under the regulations in Jordan.

15.15 **KOSOVO: PERTINENT REGULATIONS**

- Article 24 of the Law on Chemicals. This safety data contains all information required under the regulations in Jordan.

15.16 **MALAYSIA: PERTINENT REGULATIONS**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. This safety data contains all information required under the regulations in Jordan.

15.17 **MEXICO: PERTINENT REGULATIONS**

- NOM-018-STPS-2015] – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Mexico.

- Mexican Inventory of Chemical Substances: Sodium Pyruvate is listed.

SECTION 15: REGULATORY INFORMATION (Continued)

15.18 **MOLDOVA: PERTINENT REGULATIONS**

- Government Decision No. 640 of 11-09-2024. This safety data sheet is prepared in accordance with the requirements of Mexico.

15.19 **NEW ZEALAND**

- Hazardous Substances (Safety Data Sheets) Notice 2017, which was amended in 2020. This safety data sheet is prepared in accordance with the requirements of New Zealand.
- New Zealand Inventory of Chemicals (NZIoC): Sodium Pyruvate is listed.

15.20 **OMAN**

- Ministerial Decision No. 248/97 (Requirements for Safety Data Sheets). This safety data sheet is prepared in accordance with the requirements of Oman.

15.21 **QATAR, SAUDI ARABIA, AND UNITED ARAB EMIRATES: PERTINENT REGULATIONS**

- Gulf Standardization Organization Technical Order 2654:2021 9 - The Global Harmonized System (GHS) in Gulf Cooperation Council (GCC) countries: This safety data sheet is prepared in accordance with the requirements of the Gulf States.

15.22 **SERBIA: PERTINENT REGULATIONS**

- Rulebook on the Contents of the Safety Data Sheet ("Official Gazette of the Republic of Serbia" No. 11/2024): This safety data sheet is prepared in accordance with the requirements of Singapore.

15.23 **SINGAPORE: PERTINENT REGULATIONS**

- Singapore Standard SS 586-3:2022 9 - Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods: This safety data sheet is prepared in accordance with the requirements of Singapore.
- Controlled Hazardous Substances List maintained by National Environment Agency: No product component is listed.
- Singapore Ozone-Depleting Substances List: No product component is listed.

15.24 **SOUTH AFRICA: PERTINENT REGULATIONS**

- Regulations for Hazardous Chemical Agents (RHCA) 2021, specifically in Regulation 14A: This safety data sheet is prepared in accordance with the requirements of South Africa.

15.25 **SOUTH KOREA: PERTINENT REGULATIONS**

- Public Notice No. 2016-19 9 - Standards for Classification and/or Labeling of Chemicals and for Materials Safety Data Sheets: This safety data sheet is prepared in accordance with the requirements of South Korea,
- Korean Existing Chemical Substances List: Sodium Pyruvate is listed with number KE-27653.
- Korea Priority Existing Chemicals List (PEC): No component is listed.
- List of Toxic Chemical Substances: No component is listed.

15.26 **SWITZERLAND: PERTINENT REGULATIONS**

- Chemicals Ordinance (ChemO): This safety data sheet is prepared in accordance with the requirements of Switzerland.
- Youth Employment Protection Ordinance (SR 822.115): Young people in basic vocational education and training may only work with this product if this is provided for in the respective education regulation in order to achieve the training objective, if the requirements of the education plan are fulfilled, and the applicable age restrictions are observed. Young people who are not in basic vocational training may not work with this product. As young people, employees of both genders are considered up to 18 years of age. Maternity ordinance and Safety Ordinance (SR 822.111.52):
- Pregnant women and nursing mothers may only come into contact with this product during their work if it has been established on the basis of a risk assessment in accordance with Art. 63 ArGV 1 that there is no specific health risk to the mother and child or that this can be ruled out by taking suitable protective measures.
- Switzerland. Schedules 1A-3B on Substances Subject to ChKV, Regulation on the Control of Chemicals with Civilian and Military Use (ChKV): Not listed.

15.27 **TAIWAN: PERTINENT REGULATIONS**

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861: This safety data sheet is prepared in accordance with the requirements of Taiwan.
- Chemical Substance Inventory in Taiwan, China (TCSI): Sodium Pyruvate is listed.

SECTION 15: REGULATORY INFORMATION (Continued)

15.28 THAILAND: PERTINENT REGULATIONS

- Hazard Classification and Communication System of Hazardous Substances B.E.2555 (2012): This safety data sheet has been prepared in accordance with Thai requirements.
- Thailand Existing Chemicals Inventory (TECI): Sodium Pyruvate listed.

15.29 TURKEY: PERTINENT REGULATIONS

- Annex 2 Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması" (KKDIK/Registration, Evaluation, Authorization and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of Turkey.
- Chemical Inventory of Turkey per KKDIK: Sodium Pyruvate is listed.

15.30 UNITED KINGDOM: PERTINENT REGULATIONS

- UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of the United Kingdom.
- UK REACH: The substance is registered under UK REACH regulations: Sodium Pyruvate is listed.

15.31 VIETNAM: PERTINENT REGULATIONS

- Circular No. 04/2012/TT-BCT and Decree No. 113/2017/ND-CP (Law on Chemicals 2007): This safety data sheet has been prepared in accordance with the requirements of Vietnam.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- **DATE OF PREPARATION:** August 18, 2025
- **SUPERCEDES:** Not applicable.
- **CHANGE INDICATED:** New product.

16.2 DEFINITIONS

SECTION EXPLANATION OF TERMS/ABBREVIATIONS

ALL	EU: European Union. CLP: Union Classification, Labelling, and Packaging of Substances and Mixtures
3	CAS Number: Chemical Abstract Service Number, used by the American Chemical Society to uniquely identify a chemical.
8	OEL: Occupational Exposure Limit. ppm: Parts per Million. mg/m³: Milligrams per cubic meter.
9	pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, a pH value of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
11	CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designated route of administration.
12	EC50: Effect Concentration. PBT or vPvB: Persistent/ Bioaccumulative /Toxic; Very Persistent/ Very Bioaccumulative
15	REACH: European Union regulation concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances

SAFETY DATA SHEET

This document is in compliance with requirements for Safety Data Sheets implemented under the European Union regulation on the Classification, Labelling, and Packaging of Substances and Mixtures (EC No. 1272/2008, EU 2020/878; EU 2024/2865) and the standard of other nations. See section 16 for more information on the national regulations pertinent to this documentation.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFICATION

- **PRODUCT NAME:** CHIP ASSEMBLY BAGGED Q9001 2M G2 PRODUCT (POR V4 ALD-HFO2 PICOSUN)
- **PRODUCT CODE:** 850-10009-08

1.2 PRODUCT USE AND RESTRICTIONS

- **IDENTIFIED USE:** Kit component for protein sequencing process.
- **USES ADVISED AGAINST:** Procedures not related to the intended use of this product.
- **IDENTIFIED USERS:** For sale to, use, and storage by personnel trained in handling product safely.

1.3 MANUFACTURER INFORMATION

- **MANUFACTURER/SUPPLIER:** Quantum SI, Inc.
- **ADDRESS:** 29 Business Park Dr., Suite C; Branford, CT; 06405
- **BUSINESS PHONE:** 866-688-7374 (8:00 am to 5:00 pm, Eastern Standard Time)
- **EMERGENCY PHONE:** +1- Chemtrec (US and Canada): +1-800-424-9300
Outside US): +1-703- 527-3887
- **Email:** support@quantum-si.com

SECTION 2: HAZARD IDENTIFICATION

2.1 HAZARD CLASSIFICATION (EU CLP)

- Not classified as hazardous under pertinent national standards.

2.2 LABEL ELEMENTS (EU CLP)

- **Hazard Pictograms:** Not applicable.
- **Signal Word:** Not applicable.
- **Hazard Statements:** Not applicable.
- **Precautionary Statements:** Not applicable.

2.3 OTHER PERTINENT DATA ON HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS

- **Contains no material classified as follows:** Endocrine disrupting properties: In relation to human health and in relation to the environment (ED). Persistent, Bioaccumulative and Toxic (PBT); Very persistent and very bioaccumulative (vPvB); Persistent, mobile, and toxic (PMT)' Very persistent and very mobile (vPvM).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 IDENTIFICATION OF HAZARDOUS SUBSTANCES IN PRODUCT

NAME	CAS NUMBER	GHS CLASSIFICATION COMPONENT	HAZARD FOR	% (w/w)
Not classified as hazardous under pertinent national standards.				100%

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

- BASIC FIRST AID BY EXPOSURE ROUTE:**

AREA EXPOSED	TREATMENT
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Eye Contact:	Not reasonably anticipated to be a route of exposure.
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Skin Contact:	Flush area with warm, running water for several minutes if there are concerns about skin contact.
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Inhalation:	Obtain fresh air. Seek medical attention if irritation develops after exposure ends.
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Ingestion:	If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.
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Cuts from Broken Chip	Rinse wound under running water, remove visible fragments with tweezers if safe to do so. Apply gentle pressure to stop bleeding, then bandage. If fragment remains embedded, do not attempt to remove; seek medical attention.
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4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- ACUTE HEALTH EFFECTS:**

AREA EXPOSED	EFFECTS
---------------------	----------------

Eye Contact:	Not reasonably anticipated to be a route of exposure.
---------------------	---

Skin Contact:	Not anticipated to cause irritation or other skin effects.
----------------------	--

Inhalation:	Not reasonably anticipated to be a route of exposure.
--------------------	---

Ingestion:	Not reasonably anticipated to be a route of exposure.
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- CHRONIC HEALTH EFFECTS:** None known.

- TARGET ORGANS:** None known.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None known.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other type.
- UNSUITABLE FIRE EXTINGUISHING MEDIA:** None.

5.2 UNUSUAL HAZARDS IN FIRE SITUATIONS

POTENTIAL HAZARD	DESCRIPTION FOR PRODUCT
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Decomposition:	Generates irritating vapors, carbon monoxide, carbon dioxide, and other products of decomposition.
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Incompatibilities:	None known.
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Explosion Sensitivity to Mechanical Impact:	Not applicable.
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Explosion Sensitivity to Static Discharge:	Not applicable.
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5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** \Handle spilled chips wearing gloves and safety glasses.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Personnel can follow the instructions for incidental releases.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** In the event that the chips break, sweep or wipe up broken bits carefully.
- **SPECIAL NOTE:** Prior to response, determine if the chip or adjacent materials contain hazardous reagents. Though this product is not hazardous, the reagents used for protein sequencing can be. Follow the instructions indicated for spill response described on the Safety Data Sheets for reagents involved in the spill incident.

6.2 ENVIRONMENTAL PRECAUTIONS

- While the chip itself is generally inert, broken bits can be sharp. Handle debris with appropriate tools, not bare hands, to prevent cuts.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

- **SPILL RESPONSE EQUIPMENT:** Broom/dustpan if chips are broken. Appropriate waste container.

6.4 REFERENCE TO OTHER SECTIONS

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- **HYGIENE PRACTICES:** The product is used in conjunction with a protein-sequencing kit. Therefore, follow good chemical hygiene practices associated with laboratory practices.
- **HANDLING PRACTICES:** Employees must be appropriately trained to use this product safely as needed. Always handle chips with clean gloves, preferably powder-free nitrile, or latex, to prevent contamination of the chip surface or contact pads. Avoid flexing, dropping, or applying mechanical stress. Return unused chips to their original packaging and seal tightly after use.

7.2 CONDITIONS FOR SAFE STORAGE

- **STORAGE PRACTICES:** Store containers away from direct sunlight and sources of intense heat. Store chips at room temperature (15°C to 25°C; 59°F to 77°F). Store chips in dry environment, preferably with relative humidity below 60%.
- **INCOMPATIBILITIES:** See Section 10 (Stability and Reactivity).

7.3 SPECIFIC END USES

- This product is for use in protein sequencing processes by trained laboratory personnel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** No airborne occupational exposure limits have been established.
- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** None established.
- **DERIVED NO EFFECTS LEVEL:** Not established.
- **PREDICTED NO EFFECT CONCENTRATION:** Not established.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

8.2 EXPOSURE CONTROLS

- **GENERAL GUIDELINES:** This product is intended for use by trained personnel as part of a kit.
- **ENGINEERING CONTROLS:** Ensure the area has adequate ventilation for safe use with the protein sequencing kit. Eye wash stations and safety showers should be readily available.
- **RESPIRATORY PROTECTION:** None needed under normal circumstances of use.
- **HAND PROTECTION:** Nitrile or latex recommended, to protect the surface of the chip. Neoprene or nitrile gloves are recommended if skin contact can occur (e.g., spill clean-up). Ensure gloves are intact prior to use.
- **EYE PROTECTION:** Safety glasses are recommended if splash or spray can occur during use of the chip or if a spill has occurred.
- **BODY PROTECTION:** Body protection suitable to task is recommended (e.g., laboratory coat).
- **OTHER PROTECTIVE MEASURES:** Wash hands during breaks and at the end of handling the material. Immediately remove any contaminated clothing.

8.3 ENVIRONMENTAL EXPOSURE CONTROLS

- Use product according to manufacturer instructions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- **APPEARANCE AND DISTINGUISHING CHARACTERISTICS:**

<u>PROPERTY</u>	<u>DATA</u>
State:	Solid
Color:	Opaque
Odor:	Odorless
Odor Threshold:	Not determined
pH:	Not determined

- **PHYSICAL DATA:**

<u>PROPERTY</u>	<u>DATA</u>
Melting Point/Freezing Point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined
Flash Point:	Not applicable.
Evaporation Rate (Water = 1):	Not applicable.
Flammability:	Not applicable.
Upper/Lower Explosion Limits	Not applicable.
Vapor Pressure:	Not applicable.
Vapor Density	Not applicable.
Relative Density at 20 °C (68 °F)	Not determined.
Solubility:	Insoluble
Partition Coefficient/n-octanol/water:	Not applicable.
Autoignition Temperature:	Not applicable.
Decomposition Temperature:	Not applicable.
Kinematic Viscosity:	Not applicable.
Particle Characteristics:	Solid-state chip.

9.2 INFORMATION RELEVANT TO PHYSICAL HAZARD CLASSIFICATION

- **Information regarding Physical Hazard Classes** This product is not classified under any physical hazard class.
- **Other Safety Characteristics** Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 **REACTIVITY AND CHEMICAL STABILITY**

- The product is not reactive under typical conditions of use or handling.
- Normally stable under standard temperatures and pressures.

10.2 **POSSIBILITY OF HAZARDOUS REACTIONS (INCLUDING THOSE ASSOCIATED WITH FORESEEABLE EMERGENCY)**

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.3 **CONDITIONS TO AVOID**

- Avoid contact with incompatible chemicals and adverse storage conditions.

10.4 **INCOMPATIBLE MATERIALS**

- None known.

10.5 **HAZARDOUS DECOMPOSITION PRODUCTS**

- Products of thermal decomposition include carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 **INFORMATION ON ACUTE TOXICITY**

- **PRODUCT TOXICOLOGY DATA:** Not classified as having acute toxicity.:
- **DEGREE OF IRRITATION:** This product is not classified as causing skin or eye irritation.
- **SENSITIZATION:** This product does not contain any compound reported to as a skin or respiratory sensitizer.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazard Information) and Section 4 (First-Aid Measures) for additional details.
 - o **Eyes:** Not reasonably anticipated to be a route of exposure.
 - o **Skin:** Not anticipated to cause irritation or other skin effects.
 - o **Inhalation** Not reasonably anticipated to be a route of exposure.
 - o **Ingestion:** Not reasonably anticipated to be a route of exposure.

11.2 **INFORMATION ON CHRONIC TOXICITY**

- **CARCINOGENICITY STATUS:** This product is not listed as a carcinogen by NTP, IARC, or OSHA.
- **REPRODUCTIVE TOXICITY INFORMATION:** Not applicable.
- **MUTAGENIC EFFECTS** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD:** Not applicable.

11.3 **OTHER USEFUL TOXICOLOGY INFORMATION**

- **ENDOCRINE-DISRUPTING PROPERTIES:** Not applicable.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 **ENVIRONMENTAL TOXICITY**

- This product is not anticipated to be harmful to the environment.

12.2 **PERSISTENCE AND DEGRADABILITY**

- The solid-state components will persist in the environment but are not anticipated to cause environmental effects.

12.3 **BIOACCUMULATIVE POTENTIAL**

- This product is not anticipated to bioaccumulate significantly.

SECTION 12: ECOLOGICAL INFORMATION (Continued)

12.4 MOBILITY IN SOIL

- This product will not be mobile in soil.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT

- Not classified as PBT or vPvB.

12.6 ENDOCRINE DISRUPTING PROPERTIES

- None reported.

12.7 OTHER ADVERSE ENVIRONMENTAL EFFECTS

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

- Dispose of in accordance with local, state, and national regulations.

13.2 DISPOSAL CONSIDERATIONS

- **EPA RCRA WASTE CODE:** Not applicable to wastes consisting only of this product.
- **SEWAGE DISPOSAL:** Not anticipated to be a route of disposal.

13.3 DISPOSITION OF USED CHIPS

- Follow federal, state, and local regulations for the disposal associated with products associated with laboratory equipment used in protein sequencing.

SECTION 14: TRANSPORT INFORMATION

14.1 HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS

- **IATA DESIGNATION:** Product is not regulated as a dangerous good by the International Air Transport Association.
- **IMO DESIGNATION:** Product is not regulated as a dangerous good by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None known.

14.3 SPECIAL PRECAUTIONS FOR TRANSPORTERS

- None established.

14.4 TRANSPORT IN BULK

- **ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:** Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 OTHER IMPORTANT SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS

- **E.U. REACH:** Contains no substance on the REACH candidate list. Contains no REACH Annex XIV substances. REACH (1907/2006). Contains no substance with REACH Restrictions.

15.2 EUROPEAN UNION CHEMICAL SAFETY ASSESSMENT

- **ASSESSMENT INFORMATION:** No chemical safety assessment has been conducted.

Additional information related to specific national requirements for other regions is listed in the following sections.

15.3 ARGENTINA: PERTINENT REGULATIONS

- **STANDARD IRAM 41400-AR (Chemical Products - Safety Data Sheet):** This safety data sheet is prepared in accordance with the requirements of Argentina.



- Carcinogenic Substances and Agents Registry. Not applicable.
- Control of Precursors and Essential Chemicals for the Preparation of Drugs: Not applicable.

SECTION 15: REGULATORY INFORMATION (Continued)

15.4 **AUSTRALIA: PERTINENT REGULATIONS**

- National Code of Practice for the Preparation of Safety Data Sheets [NOHSC:2011(2003)]: This safety data sheet is prepared in accordance with the requirements of Australia.

15.5 **BAHRAIN: PERTINENT REGULATIONS**

- Resolution No. 4 of 2006 on the Management of Hazardous Chemicals (Articles 1 and 9): This safety data sheet is prepared in accordance with the requirements of Bahrain.

15.6 **BRAZIL: PERTINENT REGULATIONS**

- ABNT NBR 14725:2023 - Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Brazil.
- Brazilian National Inventory of Chemical Substances:
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.7 **CHILE: PERTINENT REGULATIONS**

- NCh 2245:2021 (Chemical Product Safety Data Sheet - Order and Content of Sections): This safety data sheet is prepared in accordance with the requirements of Chile.
- List of Chemicals Controlled by the Federal Police: Not applicable.

15.8 **EGYPT: PERTINENT REGULATIONS**

- Ministerial Decree No. 610/2020, which mandates the Egyptian Standard ES 8398 (Safety Data Sheet for Chemical Products — Content and Order of Sections). This safety data sheet is prepared in accordance with the requirements of Egypt.

15.9 **INDIA: PERTINENT REGULATIONS**

- Schedule 9 - The Manufacture, Storage, and Import of Hazardous Chemicals Rule, 1989: This safety data contains all information required under the regulations in India.

15.10 **INDONESIA: PERTINENT REGULATIONS**

- Decree of Ministry of Industry No.23/M-IND/PER/4/2013: This safety data contains all information required under Indonesian regulations.

15.11 **ISRAEL: PERTINENT REGULATIONS**

- Israel Standard 2302-1 (2004) - Classification, Packaging, Labeling, and Marking of Dangerous Materials: This safety data contains all information required under the regulations in Israel.

15.12 **JAPAN: PERTINENT REGULATIONS**

- JIS Z 7253:2019- (Safety Data Sheets for Chemical Products): This safety data contains all information required under the regulations in Japan.
- This product is used for research and development purposes.

15.13 **JORDAN: PERTINENT REGULATIONS**

- 29 CFR 1910.1200 (US Hazard Communication Standard): This safety data contains all information required under the regulations in Jordan.

15.14 **KENYA: PERTINENT REGULATIONS**

- Environmental Management and Coordination (Toxic and Hazardous Chemicals and Materials) Regulations. This safety data contains all information required under the regulations in Jordan.

15.15 **KOSOVO: PERTINENT REGULATIONS**

- Article 24 of the Law on Chemicals. This safety data contains all information required under the regulations in Jordan.

15.16 **MALAYSIA: PERTINENT REGULATIONS**

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. This safety data contains all information required under the regulations in Jordan.

15.17 **MEXICO: PERTINENT REGULATIONS**

- NOM-018-STPS-2015] – Official Order Establishing the Globally Harmonized System of the Classification and Labelling of Chemicals: This safety data sheet is prepared in accordance with the requirements of Mexico.

SECTION 15: REGULATORY INFORMATION (Continued)

15.18 **MOLDOVA: PERTINENT REGULATIONS**

- Government Decision No. 640 of 11-09-2024. This safety data sheet is prepared in accordance with the requirements of Mexico.

15.19 **NEW ZEALAND**

- Hazardous Substances (Safety Data Sheets) Notice 2017, which was amended in 2020. This safety data sheet is prepared in accordance with the requirements of New Zealand.
- New Zealand Inventory of Chemicals (NZIoC): This product is used for research and development purposes.

15.20 **OMAN**

- Ministerial Decision No. 248/97 (Requirements for Safety Data Sheets). This safety data sheet is prepared in accordance with the requirements of Oman.

15.21 **QATAR, SAUDI ARABIA, AND UNITED ARAB EMIRATES: PERTINENT REGULATIONS**

- Gulf Standardization Organization Technical Order 2654:2021 9 – The Global Harmonized System (GHS) in Gulf Cooperation Council (GCC) countries: This safety data sheet is prepared in accordance with the requirements of the Gulf States.

15.22 **SERBIA: PERTINENT REGULATIONS**

- Rulebook on the Contents of the Safety Data Sheet ("Official Gazette of the Republic of Serbia" No. 11/2024): This safety data sheet is prepared in accordance with the requirements of Serbia.

15.23 **SINGAPORE: PERTINENT REGULATIONS**

- Singapore Standard SS 586-3:2022 9 – Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods: This safety data sheet is prepared in accordance with the requirements of Singapore.
- Singapore Ozone-Depleting Substances List: No product component is listed.

15.24 **SOUTH AFRICA: PERTINENT REGULATIONS**

- Regulations for Hazardous Chemical Agents (RHCA) 2021, specifically in Regulation 14A: This safety data sheet is prepared in accordance with the requirements of South Africa.

15.25 **SOUTH KOREA: PERTINENT REGULATIONS**

- Public Notice No. 2016-19 9 – Standards for Classification and/or Labeling of Chemicals and for Materials Safety Data Sheets: This safety data sheet is prepared in accordance with the requirements of South Korea,
- This product is used for research and development purposes.

15.26 **SWITZERLAND: PERTINENT REGULATIONS**

- Chemicals Ordinance (ChemO): This safety data sheet is prepared in accordance with the requirements of Switzerland.
- Youth Employment Protection Ordinance (SR 822.115): Young people in basic vocational education and training may only work with this product if this is provided for in the respective education regulation in order to achieve the training objective, if the requirements of the education plan are fulfilled, and the applicable age restrictions are observed. Young people who are not in basic vocational training may not work with this product. As young people, employees of both genders are considered up to 18 years of age. Maternity ordinance and Safety Ordinance (SR 822.111.52):
- Pregnant women and nursing mothers may only come into contact with this product during their work if it has been established on the basis of a risk assessment in accordance with Art. 63 ArGV 1 that there is no specific health risk to the mother and child or that this can be ruled out by taking suitable protective measures.

15.27 **TAIWAN: PERTINENT REGULATIONS**

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861: This safety data sheet is prepared in accordance with the requirements of Taiwan.

15.28 THAILAND: PERTINENT REGULATIONS

- Hazard Classification and Communication System of Hazardous Substances B.E.2555 (2012): This safety data sheet has been prepared in accordance with Thai requirements.

SECTION 15: REGULATORY INFORMATION (Continued)

15.29 TURKEY: PERTINENT REGULATIONS

- Annex 2 Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması" (KKDIK/Registration, Evaluation, Authorization and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of Turkey.

15.30 UNITED KINGDOM: PERTINENT REGULATIONS

- UK REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): This safety data sheet has been prepared in accordance with the requirements of the United Kingdom.

15.31 VIETNAM: PERTINENT REGULATIONS

- Circular No. 04/2012/TT-BCT and Decree No. 113/2017/ND-CP (Law on Chemicals 2007): This safety data sheet has been prepared in accordance with the requirements of Vietnam.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- DATE OF PREPARATION:** August 18, 2025
- SUPERCEDES:** Not applicable.
- CHANGE INDICATED:** New product.

16.2 DEFINITIONS

SECTION EXPLANATION OF TERMS/ABBREVIATIONS

ALL	EU: European Union. CLP: Union Classification, Labelling, and Packaging of Substances and Mixtures
3	CAS Number: Chemical Abstract Service Number, used by the American Chemical Society to uniquely identify a chemical.
8	OEL: Occupational Exposure Limit. ppm: Parts per Million. mg/m³: Milligrams per cubic meter.
9	pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, a pH value of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
11	CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designated route of administration.
12	EC50: Effect Concentration. PBT or vPvB: Persistent/ Bioaccumulative /Toxic; Very Persistent/ Very Bioaccumulative
15	REACH: European Union regulation concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals. EINECS: European Inventory of Existing Commercial Chemical Substances

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 27.08.2025

Version number 6 (replaces version 5)

Revision: 27.08.2025

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier:**
 - **Trade name:** Seq Buffer 4
 - **Product number:** 806-00090-00
 - **REACH Registration number:** Not relevant
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
 - **Product category** Kit Component
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

Quantum-Si, Inc.
29 Business Park Drive
Branford, CT 06405
+1 860-577-0668
www.quantum-si.com/
- **1.4 Emergency telephone number:**

Chemtrec (US and Canada): (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:**

H412 Harmful to aquatic life with long lasting effects.
- **Precautionary Statements:**

P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.
2.1 % of the mixture consists of component(s) of unknown toxicity.
Contains 5.1 % of components with unknown hazards to the aquatic environment.
- **2.3 Other hazards:** None known
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

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Safety data sheet

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· Dangerous components:		
CAS: 1132-61-2 EINECS: 214-478-5	4-morpholinopropanesulphonic acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤2.5%
CAS: 68131-39-5 NLP: 500-195-7	C12-15 Alcohol Ethoxylate ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	≤2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** If symptoms persist, call a physician.
- **After inhalation:** In case of unconsciousness, place patient stably in side position for transportation.
- **After skin contact:**
Wash with soap and water.
Generally the product does not irritate the skin.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
If eye irritation occurs, consult a doctor.
Rinse opened eye for several minutes under running water.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- **5.3 Advice for firefighters**
Move containers from fire area if possible to do so without risk. Use water spray to cool fire-exposed containers.
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear to prevent contact with skin and eyes.
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

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Do not allow to enter sewers, surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Dispose of the material collected according to regulations.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about fire and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** None.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not required.

· **Hand protection**

Protective gloves recommended in manufacturing.



Protective gloves

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- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye/face protection**



Goggles recommended during refilling

- **Environmental exposure controls** None

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Fluid

· Colour:

Colourless

· Odour:

Odourless

· Melting point/freezing point:

Not determined.

· Boiling point or initial boiling point and boiling range

≥100 °C (7732-18-5 Water, distilled water, deionized water)

· Flammability

Not applicable.

· Lower and upper explosion limit

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Auto-ignition temperature:

Not applicable

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:

· Kinematic viscosity

Not determined.

· Dynamic:

Not determined.

· Solubility

· water:

Fully miscible.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure @ 20 °C:

≤23 hPa (7732-18-5 Water, distilled water, deionized water)

· Density and/or relative density

· Density:

Not determined.

· Relative density:

Not determined.

· Vapour density:

Not determined.

· 9.2 Other information

· Appearance:

· Form:

Liquid

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- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not self-igniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Solvent content:**
- **VOC (EC)** 0.0 g/l
0.00 %
- **Solids content:** 3.9 %
- **Change in condition**
- **Evaporation rate:** Not determined.
- **Information with regard to physical hazard classes**
- **Explosives** Non-Regulated Material
- **Flammable gases** Non-Regulated Material
- **Aerosols** Non-Regulated Material
- **Oxidising gases** Non-Regulated Material
- **Gases under pressure** Non-Regulated Material
- **Flammable liquids** Non-Regulated Material
- **Flammable solids** Non-Regulated Material
- **Self-reactive substances and mixtures** Non-Regulated Material
- **Pyrophoric liquids** Non-Regulated Material
- **Pyrophoric solids** Non-Regulated Material
- **Self-heating substances and mixtures** Non-Regulated Material
- **Substances and mixtures, which emit flammable gases in contact with water** Non-Regulated Material
- **Oxidising liquids** Non-Regulated Material
- **Oxidising solids** Non-Regulated Material
- **Organic peroxides** Non-Regulated Material
- **Corrosive to metals** Non-Regulated Material
- **Desensitised explosives** Non-Regulated Material

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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· LD/LC50 values relevant for classification:		
68131-39-5 C12-15 Alcohol Ethoxylate		
Oral	LD50	500-2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC50/4 h	>20 mg/l (Rat)
· Skin corrosion/irritation Based on available data, the classification criteria are not met.		
· Serious eye damage/irritation Based on available data, the classification criteria are not met.		
· Sensitisation Based on available data, the classification criteria are not met.		
· Germ cell mutagenicity Based on available data, the classification criteria are not met.		
· Carcinogenicity Based on available data, the classification criteria are not met.		
· Reproductive toxicity Based on available data, the classification criteria are not met.		
· STOT (Specific target organ toxicity)-single exposure Based on available data, the classification criteria are not met.		
· STOT (Specific target organ toxicity)-repeated exposure Based on available data, the classification criteria are not met.		
· Aspiration hazard Based on available data, the classification criteria are not met.		
· 11.2 Information on other hazards		
· Endocrine disrupting properties		
None of the ingredients are listed.		

SECTION 12: Ecological information

· 12.1 Toxicity	
· Aquatic toxicity: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.	
68131-39-5 C12-15 Alcohol Ethoxylate	
EC50	1 mg/l (Daphnia)
· 12.2 Persistence and degradability: No further relevant information available.	
· 12.3 Bioaccumulative potential: No further relevant information available.	
· 12.4 Mobility in soil: No further relevant information available.	
· 12.5 Results of PBT and vPvB assessment	
· PBT: Not applicable.	
· vPvB: Not applicable.	
· 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.	
· 12.7 Other adverse effects	
· Remark: Harmful to fish	
· Additional ecological information:	
· General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Harmful to aquatic organisms Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water	

(Contd. on page 7)

Safety data sheet

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Trade name: Seq Buffer 4

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR/ADN, IMDG, IATA** Non-Regulated Material
- **14.2 UN proper shipping name**
- **ADR/ADN, IMDG, IATA** Non-Regulated Material
- **14.3 Transport hazard class(es)**
- **ADR/ADN, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **14.4 Packing group**
- **ADR/ADN, IMDG, IATA** Non-Regulated Material
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU** Substance is not listed.
- **Named dangerous substances - ANNEX I** None of the ingredients are listed.
- **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)** Substance is not listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients are listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients are listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients are listed.

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 27.08.2025

Version number 6 (replaces version 5)

Revision: 27.08.2025

Trade name: Seq Buffer 4

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· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients are listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients are listed.

· **National regulations:**

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

· **Date of previous version:** 27.06.2024

· **Version number of previous version:** 4

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· **Version number of previous version:** 5

· Updated Trade name and Part Number to match current version.

· *** Data compared to the previous version altered.**

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier:**
 - **Trade name:** Trolox
 - **Product number:** 806-00005-00
 - **REACH Registration number:** Not relevant
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application of the substance / the mixture:** Kit Component
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Quantum-Si, Inc.
29 Business Park Drive
Branford, CT 06405
+1 860-577-0668
www.quantum-si.com/
- **1.4 Emergency telephone number:**
Chemtrec (US and Canada): (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- **2.2 Label elements**
- **Hazard pictograms**



GHS02

- **Signal word:** Danger
- **Hazard statements:**
H225 Highly flammable liquid and vapour.
- **Precautionary Statements:**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.

(Contd. on page 2)

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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- P243 Take action to prevent static discharges.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.

Contains 0 % of components with unknown hazards to the aquatic environment.

· **2.3 Other hazards:** None known

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 RTECS: KQ 6300000	Ethanol	 Flam. Liq. 2, H225	≥85%
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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:** If symptoms persist, call a physician.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with soap and water.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

If easy to do so, remove contact lenses if worn.

If eye irritation occurs, consult a doctor.

· **After swallowing:** If swallowed and symptoms occur, consult a doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- **5.3 Advice for firefighters**
Move containers from fire area if possible to do so without risk. Use water spray to cool fire-exposed containers.
- **Protective equipment:**
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

(Contd. on page 4)

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

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Trade name: Trolox

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- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 Ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
- **Respiratory protection:** Not required.
- **Hand protection** Protective gloves recommended in manufacturing.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye/face protection**



Tightly sealed goggles

- **Environmental exposure controls** None

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Fluid

- **Colour:**

Colourless

- **Odour:**

Alcohol-like

- **Melting point/freezing point:**

Not determined.

- **Boiling point or initial boiling point and boiling range**

≥78 °C (64-17-5 Ethanol)

- **Flammability**

Not applicable.

- **Lower and upper explosion limit**

- **Lower:**

≥3.5 Vol % (64-17-5 Ethanol)

- **Upper:**

≤15 Vol % (64-17-5 Ethanol)

- **Flash point:**

≥13 °C (64-17-5 Ethanol)

- **Auto-ignition temperature:**

≥425 °C (64-17-5 Ethanol)

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure @ 20 °C:	≤59 hPa (64-17-5 Ethanol)
· Density and/or relative density	
· Density:	Not determined.
· Relative density:	Not determined.
· Vapour density:	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	<95.0 %
· VOC (EC)	<950.0 g/l
	<95.00 %
· Solids content:	0.0 %
· Change in condition	
· Evaporation rate:	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Non-Regulated Material
· Flammable gases	Non-Regulated Material
· Aerosols	Non-Regulated Material
· Oxidising gases	Non-Regulated Material
· Gases under pressure	Non-Regulated Material
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Non-Regulated Material
· Self-reactive substances and mixtures	Non-Regulated Material
· Pyrophoric liquids	Non-Regulated Material
· Pyrophoric solids	Non-Regulated Material
· Self-heating substances and mixtures	Non-Regulated Material
· Substances and mixtures, which emit flammable gases in contact with water	Non-Regulated Material
· Oxidising liquids	Non-Regulated Material
· Oxidising solids	Non-Regulated Material
· Organic peroxides	Non-Regulated Material

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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· **Corrosive to metals**

Non-Regulated Material

· **Desensitised explosives**

Non-Regulated Material

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** Heat, flame and ignition sources.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

64-17-5 Ethanol

Oral	LD50	7,060 mg/kg (Rat)
Inhalative	LC50/4 h	20,000 mg/l (Rat)
	LC50/96 hours	12,900-15,300 mg/l (Trout)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-single exposure**
Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-repeated exposure**
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients are listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

64-17-5 Ethanol

EC50	34,900 mg/l (Daphnia)
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· **12.2 Persistence and degradability:** No further relevant information available.

(Contd. on page 7)

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR/ADN, IMDG, IATA**
- **14.2 UN proper shipping name**
- **ADR/ADN**
- **IMDG**
- **IATA**
- **14.3 Transport hazard class(es)**
- **ADR/ADN**



- **Class**
- **Label**

UN1170

UN1170 ETHANOL (ETHYL ALCOHOL) mixture
ETHANOL (ETHYL ALCOHOL) mixture
ETHANOL mixture

3 (F1) Flammable liquids.
3

- **IMDG, IATA**



- **Class**

3 Flammable liquids.

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

(Contd. of page 7)

· Label	3
· 14.4 Packing group	
· ADR/ADN, IMDG, IATA	II
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	33
· EMS Number:	F-E,S-D
· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1170 ETHANOL (ETHYL ALCOHOL) MIXTURE, 3, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Poisons Act**

· **Regulated explosives precursors**

None of the ingredients are listed.

· **Regulated poisons**

None of the ingredients are listed.

· **Reportable explosives precursors**

None of the ingredients are listed.

· **Reportable poisons**

None of the ingredients are listed.

- **Directive 2012/18/EU** Substance is not listed.

- **Named dangerous substances - ANNEX I** None of the ingredients are listed.

- **Seveso category** P5c FLAMMABLE LIQUIDS

- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Trolox

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· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t

· **National regulations:**

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

· *** Data compared to the previous version altered.**

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Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier:**
 - **Trade name:** Wash Buffer
 - **Product number:** 806-00065-00
 - **REACH Registration number:** Not relevant
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Application of the substance / the mixture:** Kit Component
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Quantum-Si, Inc.
29 Business Park Drive
Branford, CT 06405
+1 860-577-0668
www.quantum-si.com/
- **1.4 Emergency telephone number:**
Chemtrec (US and Canada): (800) 424-9300
Chemtrec (Outside US): +1 (703) 527-3887 (Collect calls accepted)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Hazard pictograms** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:**
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary Statements:**
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
2.1 % of the mixture consists of component(s) of unknown toxicity.
Contains 5.1 % of components with unknown hazards to the aquatic environment.
- **2.3 Other hazards:** None known
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 2)

Safety data sheet

REACH: Regulation (EC) No 2020/878 (in particular as amended by Regulation (EU) No. 1907/2006 & 2015/830 with respect to SDSs) & CLP: Regulation (EC) No 1272/2008

Printing date 17.01.2024

Version number 3 (replaces version 2)

Revision: 17.01.2024

Trade name: Wash Buffer

(Contd. of page 1)

· Dangerous components:		
CAS: 1132-61-2 EINECS: 214-478-5	4-morpholinopropanesulphonic acid ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	≤2.5%
CAS: 68131-39-5 NLP: 500-195-7	C12-15 Alcohol Ethoxylate ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	≤2.5%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures**
- General information:** If symptoms persist, call a physician.
- After inhalation:** In case of unconsciousness, place patient stably in side position for transportation.
- After skin contact:**
Wash with soap and water.
Generally the product does not irritate the skin.
If skin irritation occurs, consult a doctor.
- After eye contact:**
If eye irritation occurs, consult a doctor.
Rinse opened eye for several minutes under running water.
- After swallowing:** If swallowed and symptoms occur, consult a doctor.
- 4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
- Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents:** No further relevant information.
- 5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- 5.3 Advice for firefighters**
If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.
- Protective equipment:**
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- 6.2 Environmental precautions:** Dilute with plenty of water.
- 6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

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Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about fire and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** None.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not required.

Hand protection

Protective gloves recommended in manufacturing.



Protective gloves

· **Material of gloves:** Not applicable.

· **Penetration time of glove material:** Not applicable.

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· Eye/face protection



Goggles recommended during refilling

· Environmental exposure controls None

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Fluid

· Colour:

Colourless

· Odour:

Odourless

· Melting point/freezing point:

Not determined.

· Boiling point or initial boiling point and boiling range

≥100 °C (7732-18-5 Water, distilled water, deionized water)

· Flammability

Not applicable.

· Lower and upper explosion limit

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Auto-ignition temperature:

Not applicable

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:

· Kinematic viscosity

Not determined.

· Dynamic:

Not determined.

· Solubility

· water:

Fully miscible.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure @ 20 °C:

≤23 hPa (7732-18-5 Water, distilled water, deionized water)

· Density and/or relative density

· Density:

Not determined.

· Relative density:

Not determined.

· Vapour density:

Not determined.

· 9.2 Other information

· Appearance:

· Form:

Liquid

· Important information on protection of health and environment, and on safety.

· Ignition temperature:

Product is not self-igniting.

· Explosive properties:

Product does not present an explosion hazard.

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· Solvent content:	
· VOC (EC)	0.0 g/l 0.00 %
· Solids content:	3.9 %
· Change in condition	
· Evaporation rate:	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Non-Regulated Material
· Flammable gases	Non-Regulated Material
· Aerosols	Non-Regulated Material
· Oxidising gases	Non-Regulated Material
· Gases under pressure	Non-Regulated Material
· Flammable liquids	Non-Regulated Material
· Flammable solids	Non-Regulated Material
· Self-reactive substances and mixtures	Non-Regulated Material
· Pyrophoric liquids	Non-Regulated Material
· Pyrophoric solids	Non-Regulated Material
· Self-heating substances and mixtures	Non-Regulated Material
· Substances and mixtures, which emit flammable gases in contact with water	Non-Regulated Material
· Oxidising liquids	Non-Regulated Material
· Oxidising solids	Non-Regulated Material
· Organic peroxides	Non-Regulated Material
· Corrosive to metals	Non-Regulated Material
· Desensitised explosives	Non-Regulated Material

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

68131-39-5 C12-15 Alcohol Ethoxylate

Oral	LD50	500-2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC50/4 h	>20 mg/l (Rat)

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- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-single exposure**
Based on available data, the classification criteria are not met.
- **STOT (Specific target organ toxicity)-repeated exposure**
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients are listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

68131-39-5 C12-15 Alcohol Ethoxylate

EC50 1 mg/l (Daphnia)

- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN number or ID number**
ADR/ADN, IMDG, IATA Non-Regulated Material
- **14.2 UN proper shipping name**
ADR/ADN, IMDG, IATA Non-Regulated Material
- **14.3 Transport hazard class(es)**
ADR/ADN, ADN, IMDG, IATA Non-Regulated Material
- **14.4 Packing group**
ADR/ADN, IMDG, IATA Non-Regulated Material
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Poisons Act**

· **Regulated explosives precursors**

None of the ingredients are listed.

· **Regulated poisons**

None of the ingredients are listed.

· **Reportable explosives precursors**

None of the ingredients are listed.

· **Reportable poisons**

None of the ingredients are listed.

- **Directive 2012/18/EU** Substance is not listed.

- **Named dangerous substances - ANNEX I** None of the ingredients are listed.

· **National regulations:**

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

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