

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product Identifiers**

Product Name: Recombinant Human Activin B Protein, CF  
Catalog Number: 11517-AB  
Components: Acetonitrile TFA - Liquid  
Acetonitrile TFA - Lyophilized

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified Uses: For research use only.

**1.3 Details of the supplier of the safety data sheet**

Company:	R&D Systems, Inc. a Bio-Techne Brand 614 McKinley Place NE Minneapolis, MN 55413, USA	Telephone:	1-800-343-7475
		Fax:	1-612-656-4400
		Internet:	<a href="http://www.rndsystems.com">www.rndsystems.com</a>
		Email address:	<a href="mailto:info@bio-techne.com">info@bio-techne.com</a>
Canada:	21 Canmotor Ave Toronto, ON M8Z 4E6	Telephone:	1-855-668-8722
		Fax:	902-827-6402
		Email address:	<a href="mailto:Canada.inquiries@bio-techne.com">Canada.inquiries@bio-techne.com</a>
United Kingdom:	19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB	Telephone:	44 (0)1235 529449
		Fax:	44 (0)1235 533420
		Email address:	<a href="mailto:info.emea@bio-techne.com">info.emea@bio-techne.com</a>
China:	1193 Changning Road Unit 1901, Raffles Changning Office Shanghai, China	Telephone:	86-400-821-3475
		Fax:	76 (021) 52371001
		Email address:	<a href="mailto:techsupport.cn@bio-techne.com">techsupport.cn@bio-techne.com</a>

**1.4 Emergency Telephone Number**

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within U.S. 1-800-262-8200 Worldwide 1-703-741-5500

Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

**2. HAZARDS IDENTIFICATION**

See additional safety data sheets.

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**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]**

Flammable liquids – Category 2  
Acute Toxicity, oral – Category 4  
Acute Toxicity, dermal – Category 4  
Eye Irritation – Category 2A  
Acute Toxicity, inhalation – Category 4

**2.2 Label Elements**

**Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]**

Pictogram(s):



Signal Word:

Danger

Hazard Statement(s):

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Precautionary Statement(s):

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 only non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only in well-ventilated areas.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call poison center/doctor if you feel unwell.
P321	Specific treatment (see Section 4).
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In Case of Fire: Use dry chemical, CO <sub>2</sub> , or alcohol resistant foam.

**2.3 Other Hazards - None**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable.

**3.2 Mixtures**

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Acetonitrile Solution	75-05-8	200-835-2		H225, H302, H312, H319, H332	30 – 40 %
Trifluoroacetic Acid	76-05-1	200-929-3			= 0.1 %
Water	7732-18-5	231-791-2			60 – 70 %

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General Advice**

Consult a doctor and show this safety data sheet.

**If Inhaled**

Acetonitrile Solution – Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Trifluoroacetic Acid – Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

**In Case of Skin Contact**

Acetonitrile Solution – Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Trifluoroacetic Acid – Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

**In Case of Eye Contact**

Acetonitrile Solution – Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If eye irritation persists, consult a doctor.

Trifluoroacetic Acid – Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

**If Swallowed**

Acetonitrile Solution – Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Trifluoroacetic Acid – Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

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

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

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

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing Media**

**Suitable extinguishing media**

Acetonitrile Solution – Dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Trifluoroacetic Acid – Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Acetonitrile Solution – Use water spray to cool unopened containers.

**5.2 Special hazards arising from the substance or mixture**

Acetonitrile Solution – Emits toxic fumes under fire conditions. Carbon oxides.

Trifluoroacetic Acid – In combustion, may emit toxic fumes.

**5.3 Precautions for fire-fighters**

Acetonitrile Solution – Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Trifluoroacetic Acid – Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Acetonitrile Solution – Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate all personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Trifluoroacetic Acid – Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

### 6.2 Environmental precautions

Acetonitrile Solution – Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Trifluoroacetic Acid – Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Acetonitrile Solution – Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

Trifluoroacetic Acid – Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

### 6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Acetonitrile Solution – Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Trifluoroacetic Acid – Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

### 7.2 Conditions for safe storage, including any incompatibilities

Acetonitrile Solution – Store in cool, well-ventilated area. Keep cool. Keep container tightly sealed until ready to use.

Trifluoroacetic Acid – Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready to use.

### 7.3 Specific end uses

Not applicable.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace and control parameters

Acetonitrile Solution – STEL: 102 mg/m<sup>3</sup> 15 minutes. TWA: 68 mg/m<sup>3</sup> 8 hours.

Trifluoroacetic Acid – Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate Engineering Controls

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

### 8.3 Personal Protective Equipment

#### Eye / Face Protection

Use appropriate safety glasses.

#### Skin Protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

#### Body Protection

Wear appropriate protective clothing.

#### Respiratory Protection

If risk assessment indicates necessary, use a suitable respirator.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Colorless liquid	<b>Vapor Pressure</b>	No data available.
<b>Odor</b>	No data available.	<b>Vapor Density</b>	No data available.
<b>Odor Threshold</b>	No data available.	<b>Relative Density</b>	No data available.
<b>pH</b>	2.0 ± 0.3	<b>Solubility(ies)</b>	Soluble
<b>Melting / Freezing Point</b>	No data available.	<b>Partition Coefficient</b>	No data available.
<b>Boiling Point / Range</b>	No data available.	<b>Auto ignition Temperature</b>	No data available.
<b>Flash Point</b>	No data available.	<b>Decomposition Temperature</b>	No data available.
<b>Evaporation Rate</b>	No data available.	<b>Viscosity</b>	No data available.

**Flammability (Solid, Gas)**  
**Upper / Lower Flammability or Explosive Limits**

No data available.  
No data available.

**Explosive Properties**  
**Oxidizing Properties**

No data available.  
No data available.

**9.2 Other safety information**

No data available.

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**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Stable under recommended transport or storage conditions.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

**10.4 Conditions to avoid**

Acetonitrile Solution – Avoid sources of ignition (heat, spark, flame and direct sunlight).  
Trifluoroacetic Acid - Heat, moisture.

**10.5 Incompatible materials**

Acetonitrile Solution – Strong acids/alkalis, strong oxidizing/reducing agents. May attach plastics, rubbers and coatings.  
Trifluoroacetic Acid – Strong acids/alkalis, strong oxidizing/reducing agents.

**10.6 Hazardous decomposition products**

Acetonitrile Solution – In combustion may emit toxic fumes such as hydrogen cyanide (hydrocyanide acid), carbon dioxide, carbon monoxide, or oxides of nitrogen.  
Trifluoroacetic Acid – Strong acids/alkalis, strong oxidizing/reducing agents.

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**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute Toxicity**

Acetonitrile Solution - LD50 rat oral - Dose: 2460 mg/kg; Dermal: LD50 rabbit - Dose: >2000 mg/kg, Inhalation: LD50 rat - Dose: 12.68 mg/L with 8 hours of exposure  
Trifluoroacetic Acid - Classified based on available data

**Skin Corrosion/Irritation**

Acetonitrile Solution - Mild irritant rabbit  
Trifluoroacetic Acid - Classified based on available data

**Serious Eye Damage / Irritation**

Acetonitrile Solution - Moderate irritant rabbit  
Trifluoroacetic Acid - Classified based on available data

**Respiratory or Skin Sensitization**

Classified based on available data.

**Germ Cell Mutagenicity**

Classified based on available data.

**Carcinogenicity**

Classified based on available data.

**Reproductive Toxicity**

Classified based on available data.

**Specific Target Organ Toxicity – Single Exposure**

Classified based on available data.

**Specific Target Organ Toxicity – Repeated Exposure**

Classified based on available data.

**Aspiration Hazard**

Classified based on available data.

**Symptoms / Routes of Exposure**

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.  
Ingestion: There may be irritation of the throat.  
Skin: Acetonitrile Solution - Adverse symptoms may include the following: irritation, redness.  
Trifluoroacetic Acid - There may be mild irritation at the site of contact.  
Eyes: Acetonitrile Solution - Adverse symptoms may include the following: pain or irritation, watering, redness.  
Trifluoroacetic Acid - There may be irritation and redness.  
Delayed/Immediate Effects: No known symptoms.

## Additional Information

Classified based on available data

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### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Acetonitrile Solution - Acute LC50 3600000 µg/L Fresh water Daphnia - Daphnia magna - <24 hours. Acute LC50 >1500 mg/L Fresh water Fish - Pimephales promelas - Juvenile) - 0.2 to 0.5 g at 96 hours.

Trifluoroacetic Acid - No data available.

#### 12.2 Persistence and degradability

No data available.

#### 12.3 Bio accumulative potential

Acetonitrile Solution - Potential low.

Trifluoroacetic Acid - No data available.

#### 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

No data available.

#### 12.6 Other adverse effects

No data available.

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### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

##### Product

Acetonitrile Solution - Dispose of waste in accordance to applicable national, regional, or local regulations.

Trifluoroacetic Acid - Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

##### Contaminated Packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

### 14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

#### 14.1 UN-Number

Acetonitrile Solution - UN1993

Trifluoroacetic Acid - Does not meet the criteria for classification as hazardous for transport.

#### 14.2 UN proper shipping name

Acetonitrile Solution - Flammable liquids, n.o.s.

Trifluoroacetic Acid - Does not meet the criteria for classification as hazardous for transport.

#### 14.3 Transport hazard class(es)

Acetonitrile Solution - 3

Trifluoroacetic Acid - Does not meet the criteria for classification as hazardous for transport.

#### 14.4 Packaging group

Acetonitrile Solution - II

Trifluoroacetic Acid - Does not meet the criteria for classification as hazardous for transport.

#### 14.5 Environmental hazards

Does not meet the criteria for classification as hazardous for transport.

#### 14.6 Additional Transport Information

Does not meet the criteria for classification as hazardous for transport.

##### Special Precautions for users

Does not meet the criteria for classification as hazardous for transport.

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### 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 and 29 CFR 1910.1200 [OSHA]

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

**TSCA (Toxic Substances Control Act):** Not applicable.

**SARA 313:** Not applicable.

**SARA 311/312:** Not applicable.

**CERCLA Reportable Quantity:** Not applicable.

**California Proposition 65:** Not applicable.

**15.2 Chemical safety assessment**

A Chemical Safety Assessment has not been made for this product.

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**16. OTHER INFORMATION**

**Further Information**

Copyright © 2024 R&D Systems, Inc. a Bio-Techne Brand

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet.

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**1.2 Relevant identified uses of the substance or mixture and uses advised against**

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**1.3 Details of the supplier of the safety data sheet**

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**2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

This substance does not meet the classification criteria according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910 [OSHA].

**2.2 Label Elements**

This product does not need to be labelled in accordance with Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].

**2.3 Other Hazards – None**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable.

**3.2 Mixtures**

This product does not contain hazardous chemicals at concentrations of 1% or greater. This product is not known to contain carcinogens at concentrations of 0.1% or greater.

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General Advice**

Consult a doctor and show this safety data sheet.

**If Inhaled**

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

**In Case of Skin Contact**

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

**In Case of Eye Contact**

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

**If Swallowed**

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.



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

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

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

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

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**5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing Media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

In combustion, may emit toxic fumes.

**5.3 Precautions for fire-fighters**

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

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**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

**6.4 Reference to other sections**

For required PPE see section 8. For disposal see section 13.

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**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

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

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

**7.3 Specific end uses**

Not applicable.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Components with workplace and control parameters**

Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate Engineering Controls**

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

**8.3 Personal Protective Equipment**

**Eye / Face Protection**

Use appropriate safety glasses.

**Skin Protection**

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

**Body Protection**

Wear appropriate protective clothing.

**Respiratory Protection**

If risk assessment indicates necessary, use a suitable respirator.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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

<b>Appearance</b>	Lyophilized white powder or clear liquid	<b>Vapor Pressure</b>	No data available.
<b>Odor</b>	Little to none.	<b>Vapor Density</b>	No data available.
<b>Odor Threshold</b>	No data available.	<b>Relative Density</b>	No data available.
<b>pH</b>	No data available.	<b>Solubility</b>	No data available.

<b>Melting / Freezing Point</b>	No data available.	<b>Partition Coefficient</b>	No data available.
<b>Boiling Point / Range</b>	No data available.	<b>Auto ignition Temperature</b>	Product is not self-igniting.
<b>Flash Point</b>	No data available.	<b>Decomposition Temperature</b>	No data available.
<b>Evaporation Rate</b>	No data available.	<b>Viscosity</b>	No data available.
<b>Flammability (Solid, Gas)</b>	No data available.	<b>Explosive Properties</b>	No data available.
<b>Upper / Lower Flammability or Explosive Limits</b>	No data available.	<b>Oxidizing Properties</b>	No data available.

**9.2 Other safety information**

No data available.

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**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Stable under recommended transport or storage conditions.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

**10.4 Conditions to avoid**

Heat, moisture.

**10.5 Incompatible materials**

Strong acids/alkalis, strong oxidizing/reducing agents.

**10.6 Hazardous decomposition products**

Strong acids/alkalis, strong oxidizing/reducing agents.

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**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute Toxicity**

Classified based on available data

**Skin Corrosion/Irritation**

Classified based on available data

**Serious Eye Damage / Irritation**

Classified based on available data

**Respiratory or Skin Sensitization**

Classified based on available data.

**Germ Cell Mutagenicity**

Classified based on available data.

**Carcinogenicity**

Classified based on available data.

**Reproductive Toxicity**

Classified based on available data.

**Specific Target Organ Toxicity – Single Exposure**

Classified based on available data.

**Specific Target Organ Toxicity – Repeated Exposure**

May cause eye burns.

**Aspiration Hazard**

Classified based on available data.

**Symptoms / Routes of Exposure**

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: There may be irritation of the throat.

Skin: There may be mild irritation at the site of contact.

Eyes: May cause eye burns.

Delayed/Immediate Effects: No known symptoms.

**Additional Information**

Classified based on available data

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**12. ECOLOGICAL INFORMATION**

- 12.1 **Toxicity**  
No data available.
- 12.2 **Persistence and degradability**  
No data available.
- 12.3 **Bio accumulative potential**  
No data available.
- 12.4 **Mobility in soil**  
No data available.
- 12.5 **Results of PBT and vPvB assessment**  
No data available.
- 12.6 **Other adverse effects**  
No data available.

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13. **DISPOSAL CONSIDERATIONS**

13.1 **Waste treatment methods**

**Product**

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

**Contaminated Packaging**

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

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14. **TRANSPORT INFORMATION**

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 **UN-Number**

Does not meet the criteria for classification as hazardous for transport.

14.2 **UN proper shipping name**

Does not meet the criteria for classification as hazardous for transport.

14.3 **Transport hazard class(es)**

Does not meet the criteria for classification as hazardous for transport.

14.4 **Packaging group**

Does not meet the criteria for classification as hazardous for transport.

14.5 **Environmental hazards**

Does not meet the criteria for classification as hazardous for transport.

14.6 **Additional Transport Information**

Does not meet the criteria for classification as hazardous for transport.

**Special Precautions for users**

Does not meet the criteria for classification as hazardous for transport.

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15. **REGULATORY INFORMATION**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 and 29 CFR 1910.1200 [OSHA]

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

**TSCA (Toxic Substances Control Act):** Not applicable.

**SARA 313:** Not applicable.

**SARA 311/312:** Not applicable.

**CERCLA Reportable Quantity:** Not applicable.

**California Proposition 65:** Not applicable.

15.2 **Chemical safety assessment**

A Chemical Safety Assessment has not been made for this product.

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16. **OTHER INFORMATION**

**Further Information**

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This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet.