

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

### 1.1 Product Identifiers

Product Name: Human Perforin QuickKit ELISA  
 Catalog Number: QK8011  
 Components: Plate, QuickKit Coated  
 Capture Antibody Concentrate, Human Perforin QuickKit  
 Detection Antibody Concentrate, Human Perforin QuickKit  
 Standard, Human Perforin, QuickKit  
 Assay Diluent, RD1-55, Q  
 Calibrator Diluent, RD5Z, Q  
 TMB ELISA Substrate  
 Wash Buffer Concentrate, 25X  
 ELISA Stop Solution

### 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.

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

**1.1 Product Identifiers**

Product Name: Plate, QuicKit Coated  
Catalog Number: 899063

**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
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China:	1193 Changning Road Unit 1901, Raffles Changning Office Shanghai, China	Telephone:	86-400-821-3475
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Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

**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 1910.1200 [OSHA].

**2.2 Label Elements**

This product does not need to be labeled 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**

Not applicable.

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General Advice**

Not applicable.

**If Inhaled**

Not applicable.

**In Case of Skin Contact**

Not applicable.

**In Case of Eye Contact**

Not applicable.

**If Swallowed**

Not applicable.

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

Not applicable.

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

Not applicable.

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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**

None known.

**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**

Not applicable.

**6.2 Environmental precautions**

Not applicable.

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

Not applicable.

**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**

Not applicable.

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

Store in cool, dry place.

**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**

Not applicable.

**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>	Microplate coated in antibodies	<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>	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.
<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.

**10.4 Conditions to avoid**

None known.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

None known.

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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**

Classified based on available data.

**Aspiration Hazard**

Classified based on available data.

**Symptoms / Routes of Exposure**

Inhalation: Not a normal route of entry.

Ingestion: Not a normal route of entry.

Skin: Not a normal route of entry.

Eyes: Not a normal route of entry.

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.

**14.7 Additional Transport Information**

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.

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

**1.1 Product Identifiers**

Product Name: Capture Antibody Concentrate, Human Perforin Quickit  
Catalog Number: 899564

**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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
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#### 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	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>	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.
<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.

**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.

**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**

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

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.

### 14.7 Additional Transport Information

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.

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

**1.1 Product Identifiers**

Product Name: Detection Antibody Concentrate, Human Perforin QuickKit  
Catalog Number: 899565

**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>
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		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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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



Signal Word: Warning  
Hazard Statement(s): H317 May cause an allergic skin reaction.  
Precautionary Statement(s):  
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P333+P317 If skin irritation or rash occurs: Get medical help.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P501 Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One and 2-Methyl-2H-Isothiazolin-3-One (3:1)	55965-84-9	9114-418-6	613-167-00-5	H317	= 0.005%

**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.

---

### 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.

---

### 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.

---

### 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.

---

### 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.

---

## 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>	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.
<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.

---

## 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.

---

## 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

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

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.

---

### 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.

---

### 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.

#### 14.7 Additional Transport Information

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

---

### 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.

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

**1.1 Product Identifiers**

Product Name: Standard, Human Perforin QuickKit  
Catalog Number: 899566

**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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One and 2-Methyl-2H-Isothiazolin-3-One (3:1)	55965-84-9	9114-418-6	613-167-00-5	H317	= 0.005%

**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.

---

### 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.

---

### 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.

---

### 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.

---

### 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.

---

## 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>	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.
<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

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

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.

---

### 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.

#### 14.7 Additional Transport Information

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

---

### 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.

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

**1.1 Product Identifiers**

Product Name: Assay Diluent, RD1-55, Q  
Catalog Number: 895066

**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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One and 2-Methyl-2H-Isothiazolin-3-One (3:1)	55965-84-9	9114-418-6	613-167-00-5	H317	= 0.005%

**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.

---

### 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.

---

### 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.

---

### 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.

---

### 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.

---

## 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>	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.
<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.

---

## 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.

---

## 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

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:	There may be mild irritation at the site of contact.
Eyes:	There may be irritation and redness.
Delayed/Immediate Effects:	No known symptoms.

## Additional Information

Classified based on available data

---

### 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.

---

### 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.

---

### 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.

#### 14.7 Additional Transport Information

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

---

### 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.

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

**1.1 Product Identifiers**

Product Name: Calibrator Diluent, RD5Z, Q  
Catalog Number: 895206

**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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
Mixture of 5-Chloro-2-Methyl-4- Isothiazolin-3-One and 2-Methyl-2H-Isothiazolin-3-One (3:1)	55965-84-9	9114-418-6	613-167-00-5	H317	= 0.005%

**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.

---

### 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.

---

### 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.

---

### 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.

---

### 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.

---

## 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>	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.
<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.

---

## 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

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

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.

---

### 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.

---

### 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.

#### 14.7 Additional Transport Information

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

---

### 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.

---

### 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.

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

### 1.1 Product Identifiers

Product Name: TMB ELISA Substrate  
 Catalog Number: 642736

### 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

### 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 1910.1200 [OSHA].

### 2.2 Label Elements

This product does not need to be labeled 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.

#### In Case of Skin Contact

Wash skin with soap and water. If irritation occurs, consult a doctor.

#### In Case of Eye Contact

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

#### If Swallowed

Rinse mouth with water. Consult a doctor if you feel unwell.

### 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

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.

---

### 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 contact with skin, eyes, or clothing.

#### 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.

---

### 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.

---

### 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.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Clear liquid	Vapor Pressure	No data available.
Odor	Little to none	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
pH	No data available.	Solubility	Completely soluble.
Melting / Freezing Point	No data available.	Partition Coefficient	No data available.
Boiling Point / Range	No data available.	Auto ignition Temperature	No data available.
Flash Point	No data available.	Decomposition Temperature	No data available.
Evaporation Rate	No data available.	Viscosity	No data available.
Flammability (Solid, Gas)	No data available.	Explosive Properties	No data available.

**Upper / Lower Flammability or Explosive Limits**

No data available.

**Oxidizing Properties**

No data available.

**9.2 Other safety information**

No data available.

---

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No information available.

**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**

None known based on information supplied.

**10.5 Incompatible materials**

Strong acids/alkalis, strong oxidizing agents.

**10.6 Hazardous decomposition products**

None known based on information supplied.

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**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute Toxicity**

Classified based on available data.

**Skin Corrosion/Irritation**

Classification based on data available for ingredients. Irritating to skin.

**Serious Eye Damage / Irritation**

Classification based on data available for ingredients. Causes serious eye irritation.

**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:	Specific test data for the substance or mixture is not available.
Ingestion:	Specific test data for the substance or mixture is not available.
Skin:	Specific test data for the substance or mixture is not available.
Eyes:	Specific test data for the substance or mixture is not available.
Delayed/Immediate Effects:	No information available.

**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.

---

**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.

---

**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.

**14.7 Additional Transport Information**

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

---

**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.

---

**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.

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

**1.1 Product Identifiers**

Product Name: Wash Buffer 25X Concentrate  
Catalog Number: 895003

**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**

**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].  
Sensitization, skin - Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H317 May cause an allergic skin reaction.

Precautionary Statement(s):

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an approved waste disposal plant.

**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	Concentration
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#### 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	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>	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.
<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.

**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.

**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**

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

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.

### 14.7 Additional Transport Information

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.

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

**1.1 Product Identifiers**

Product Name: ELISA Stop Solution  
Catalog Number: 642827

**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**

**2.1 Classification of the substance or mixture**

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

Corrosive to metal – Category 1  
Acute toxicity – oral – Category 4  
Acute toxicity – dermal – Category 4  
Skin corrosion / irritation – Category 1B  
Serious eye damage / eye irritation – Category 1

**2.2 Label Elements**

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

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H335	May cause respiratory irritation.

Precautionary Statement(s):

P234	Keep only in original packaging.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosion resistant container with a resistant inner liner.
P264	Wash thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P363	Wash contaminated clothing before reuse.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**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	Concentration
Methanesulfonic acid	75-75-2	200-898-6		H290, H314, H318, H302, H312, H335	1 - <10%

**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. Remove contact lenses, if present and easy to do so. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. 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**

May cause redness and tearing of the eyes. Burning sensation.

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

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****5.1 Extinguishing Media****Suitable extinguishing media**

Use alcohol-resistant foam, dry chemical or carbon dioxide. CAUTION: Use of water spray when fighting fire may be inefficient.

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

No information available.

**5.3 Precautions for fire-fighters**

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

**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 contact with skin, eyes, or clothing.

**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.

**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, or clothing. Do not eat, drink, or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

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

**7.3 Specific end uses**

Not applicable.

**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 with side-shields.

##### 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>	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>	<= 1	<b>Solubility</b>	Completely 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.
<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

No information available.

### 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

None known based on information supplied.

### 10.5 Incompatible materials

Strong acids/alkalis, strong oxidizing agents.

### 10.6 Hazardous decomposition products

None known based on information supplied.

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity

Classified based on available data.

#### Skin Corrosion/Irritation

Classification based on data available for ingredients. Irritating to skin.

#### Serious Eye Damage / Irritation

Classification based on data available for ingredients. Causes serious eye irritation.

#### 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: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.  
Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
Skin: Specific test data for the substance or mixture is not available. Causes skin irritation (based on components).  
Eyes: Specific test data for the substance or mixture is not available. Causes serious eye irritation (based on components). May cause redness, itching, and pain.  
Delayed/Immediate Effects: Redness. May cause redness and tearing of the eyes.

**Additional Information**

Classified based on available data

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**12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

LC50 – 73 mg/L (96h, *Oncorhynchus mykiss*). EC50 – 12 mg/L (48h, *Daphnia pulex*)

**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**

UN2586

**14.2 UN proper shipping name**

Alkyl sulfonic acids, liquid

**14.3 Transport hazard class(es)**

8

**14.4 Packaging group**

III

**14.5 Environmental hazards**

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

**14.7 Additional Transport Information**

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.