

Safety Data Sheet

۱.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF THE CO	MPANY/UNDERTAKING	i		
.1	Product Identifiers					
	Product Name:	Human XL Cytokine Luminex Performance I	Base Kit			
	Catalog Number:	LUXLM000B				
	Components:	Human Panel Standard Cocktail (Proclin 300) mixture)			
		Human Panel Low Control (contains Proclin	300 mixture)			
		Human Panel High Control (contains Proclin	300 mixture)			
		Human XL Panel Microparticle Cocktail (con	tains Sodium Azide)			
		Human Panel Biotin-Antibody Cocktail				
		Streptavidin-PE (contains Proclin 300 mixtur	re)			
		Microparticle Diluent (contains Proclin 300 m	nixture)			
		Biotin Antibody Diluent 2 (contains Proclin 30	00 mixture)			
		Calibrator Diluent RD6-65 (contains Proclin	300 mixture)			
		Wash Buffer Concentrate (contains Proclin 3	300 mixture)			
2	Relevant identified uses of the substance or mixture and uses advised against					
	Identified Uses:	For research use only.				
3	Details of the supplie	r of the safety data sheet				
	Company:	R&D Systems, Inc. a Bio-Techne Brand	Telephone:	1-800-343-7475		
		614 McKinley Place NE	Fax:	1-612-656-4400		
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com		
			Email address:	info@bio-techne.com		
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722		
		Toronto, ON M8Z 4E6 Canada	Fax:	902-827-6402		
			Email address:	Canada.inquiries@bio-techne.com		
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449		
		Abingdon Science Park	Fax:	44 (0)1235 533420		
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com		
	China:	1193 Changning Road	Telephone:	86-400-821-3475		
	China:	1193 Changning Road Unit 1901, Raffles Changning Office	Telephone: Fax:	86-400-821-3475 76 (021)52371001		

Emergency Tel: 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 T	HE COMPANY/UNDERTAKIN	IG				
1.1	Product Identifiers							
	Product Name:	Human Panel Standard Cocktail (con	tains Proclin 300 mixture)					
1.2	Relevant identified us	es 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 Bra 614 McKinley Place NE	Fax:	1-800-343-7475 1-612-656-4400				
		Minneapolis, MN 55413, USA	Internet: Email address:	www.rndsystems.com info@bio-techne.com				
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722				
		Toronto, ON M8Z4E6	Fax:	902-827-6402				
			Email address:	Canada.inquiries@bio-techne.com				
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449				
	, i i i i i i i i i i i i i i i i i i i	Abingdon Science Park	Fax:	44 (0)1235 533420				
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com				
	China:	1193 Changning Road	Telephone:	86-400-821-3475				
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001				
		Shanghai, China	Email address:	techsupport.cn@bio-techne.com				
1.4	Emergency Telephone	e Number						
	Emergency Tel: For che	emical emergency, spill, leak, fire, exposure	, or accident call CHEMTREC da	y or night: Within U.S. 1-800-262-8200 Wo	rldwide 1-703-741-5500			
	Bio-Techne Tel: US: 61	2-379-2956 or 800-343-7475 / Europe: +44	4(0)1235-529449 / China 86-400-	821-3475				
2.	HAZARDS IDENTIFIC	ATION						
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]							
	Pictogram(s):	(1)						
	Signal Word:	Warning						
	Hazard Statement(s):							
	H317	May cause an allergic skin rea	action.					
	Precautionary Statemer	nt(s):						
	P261	Avoid breathing dust/fumes/ga	as/mist/vapors/spray.					
	P272		should not be allowed out of the	•				
	P200 P302+352	P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+352 IF ON SKIN: Wash with plenty of soap and water.						
	P333+313	If skin irritation or rash occurs	Get medical advice/attention.					
	P362+P364 P321	P362+P364 Take off contaminated clothing and wash it before reuse. P321 Specific treatment (see section 4 on this SDS).						
	P363	Wash contaminated clothing b	before reuse.					
2.3	P501 Other Hazards - None	Dispose of contents/container	In accordance with local/regiona	I/national/international regulations.				
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS						
3.1	Substances							
-	Not applicable.							
3.2	Mixtures							
	Component	CAS No. EC I	No. Index No	Classification	Co			

Proclin 300 Mixture <0.1% (active 96118-96-6

Conc.

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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.
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Ingestion:	There may be irritation of the throat.
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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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

Copyright © 2018 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.

					2		
1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF T	HE COMPANY/UNDERTAKIN	G			
1.1	Product Identifiers						
	Product Name:	Human Panel Low Control (contains	Proclin 300 mixture)				
1.2	Relevant identified us	es 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 Bra	and Telephone:	1-800-343-7475			
		614 McKinley Place NE	Fax:	1-612-656-4400			
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com			
			Email address:	info@bio-techne.com			
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722			
		Toronto, ON M8Z4E6	Fax:	902-827-6402			
			Email address:	Canada.inquiries@bio-techne.com			
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449			
	Onnea Kingdom.	Abingdon Science Park	Fax:	44 (0)1235 533420			
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com			
		-					
	China:	1193 Changning Road	Telephone:	86-400-821-3475			
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001			
1.4	Emergency Telephone	Shanghai, China	Email address:	techsupport.cn@bio-techne.com			
1.4		emical emergency, spill, leak, fire, exposure		ar night: Within LLC, 1, 200, 262, 2200 Wa	rduida 1 702 711 5500		
		2-379-2956 or 800-343-7475 / Europe: +44		•	Idwide 1-703-741-5500		
		2-373-2330 01 000-343-74737 Europe. +4	(0)1233-3234437 China 80-400-	JZ 1-0+7 J			
2.	HAZARDS IDENTIFIC	ATION					
2.1	Classification of the s	ubstance or mixture					
	Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]						
	Sensitization, skin - Cat	tegory 1					
2.2	Label Elements						
	Labeling according to	Regulation (EC) No 1272/2008 [GHS/CLI	2]				
	Pictogram(s):	\wedge					
	i lotogram(o).	\bigcirc					
	Signal Word:	Warning					
		•••annig					
	Hazard Statement(s):						
	H317	May cause an allergic skin re	action.				
	Precautionary Statemer	nt(s):					
	P261	Avoid breathing dust/fumes/g	as/mist/vapors/spray.				
	P272	•	should not be allowed out of the	•			
	P280 P302+352	Wear protective gloves/protect IF ON SKIN: Wash with plents	tive clothing/eye protection/face p of soap and water	protection.			
	P333+313		: Get medical advice/attention.				
	P362+P364	Take off contaminated clothin	0				
	P321 P363	Specific treatment (see sectio Wash contaminated clothing b					
	P501			/national/international regulations.			
2.3	Other Hazards - None						
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS					
3.1	Substances						
	Not applicable.						
3.2	Mixtures						
	Component	CAS No. EC	No. Index No	Classification	Conc.		

Proclin 300 Mixture <0.1% (active 96118-96-6

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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.
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Ingestion:	There may be irritation of the throat.
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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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

Copyright © 2018 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.

1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF 1	HE COMPANY/UNDERTAKIN	G			
1.1	Product Identifiers						
	Product Name:	Human Panel High Control (contains	Proclin 300 mixture)				
1.2	Relevant identified us	es 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 Bra	and Telephone:	1-800-343-7475			
		614 McKinley Place NE	Fax:	1-612-656-4400			
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com			
			Email address:	info@bio-techne.com			
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722			
		Toronto, ON M8Z4E6	Fax:	902-827-6402			
			Email address:	Canada.inquiries@bio-techne.com			
	United Kingdom	10 Porton Long	Telephone	44 (0)1225 520440			
	United Kingdom:	19 Barton Lane Abingdon Science Park	Telephone: Fax:	44 (0)1235 529449 44 (0)1235 533420			
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com			
		-					
	China:	1193 Changning Road	Telephone:	86-400-821-3475			
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001			
1.4	Emergency Telephone	Shanghai, China	Email address:	techsupport.cn@bio-techne.com			
1.4		emical emergency, spill, leak, fire, exposure		er night: Within LLS, 1,800,262,8200 Ma	rduide 1 702 711 5500		
		2-379-2956 or 800-343-7475 / Europe: +4-		•	Indwide 1-705-741-5500		
		2-373-2330 01 000-343-74737 Europe. +4	(0)1233-3234437 China 80-400-	521-5475			
2.	HAZARDS IDENTIFIC	ATION					
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 - Cat	tegory 1					
2.2	Label Elements						
	Labeling according to	Regulation (EC) No 1272/2008 [GHS/CL	2]				
	Pictogram(s):	\wedge	-				
	r lotogram(b).	$\mathbf{\nabla}$					
	Signal Word:	Warning					
	Signal Word.	warning					
	Hazard Statement(s):						
	H317	May cause an allergic skin re	action.				
	Precautionary Statemer	nt(s):					
	P261	Avoid breathing dust/fumes/g	as/mist/vapors/spray.				
	P272	Contaminated work clothing	should not be allowed out of the	•			
	P280 P302+352	Wear protective gloves/protective gloves/protect	tive clothing/eye protection/face p	protection.			
	P333+313		Get medical advice/attention.				
	P362+P364	Take off contaminated clothin	0				
	P321 P363	Specific treatment (see section Wash contaminated clothing					
	P501			/national/international regulations.			
2.3	Other Hazards - None						
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS					
3.1	Substances						
	Not applicable.						
3.2	Mixtures						
	Component	CAS No. EC	No. Index No	Classification	Conc.		
	panon	U. 10 110. LU		Glassification	00110.		

Proclin 300 Mixture <0.1% (active 96118-96-6

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.

	Product Identifiers				
	Product Name:	Human XL Panel Microparticle Cocktail (c			
	Relevant identified uses	s of the substance or mixture and uses adv	vised against		
	Identified Uses:	For research use only.			
6	Details of the supplier o	f the safety data sheet			
	Company:	R&D Systems, Inc. a Bio-Techne Brand	Telephone:	1-800-343-7475	
		614 McKinley Place NE	Fax:	1-612-656-4400	
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com	
			Email address:	info@bio-techne.com	
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722	
		Toronto, ON M8Z4E6 Canada	Fax:	902-827-6402	
			Email address:	Canada.inquiries@bio-techne.com	
			Talasta	11 (0) 1005 500 110	
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449 44 (0)1235 523420	
		Abingdon Science Park Abingdon, OX14 3NB	Fax: Email address:	44 (0)1235 533420 info.emea@bio-techne.com	
			Linan audiess.	mo.emea@bio-techne.com	
	China:	1193 Changning Road	Telephone:	86-400-821-3475	
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001	
		Shanghai, China	Email address:	techsupport.cn@bio-techne.com	
	Emergency Telephone N	lumber			
	Emergency Tel: For chem	nical 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)1	1235-529449 / China 86-400-8	21-3475	
	-	g to Regulation (EC) No 1272/2008 [GHS/CI			
	This substance does not r	neet the classification criteria of the EC Direc	tives 67/548/EED, 1999/45/EC	C, 1272/20008 [CLP], GHS or 29 CFR 1910.1200 [OSHA	A]
	Label Elements				
	The product does not nee			_	
		ed to be labelled in accordance with EC direct	ives or respective national laws	S.	
	Other Hazards - None	to be labelled in accordance with EC direct	ives or respective national laws	5.	
			ives or respective national law:	5.	
	COMPOSITION/INFOR	ed to be labelled in accordance with EC direct	ives or respective national law:	S.	
	COMPOSITION/INFOR Substances		ives or respective national law:	S.	
	COMPOSITION/INFOR Substances Not applicable.		ives or respective national law:	S.	
	COMPOSITION/INFOR Substances		ives or respective national law:	S.	
	COMPOSITION/INFOR Substances Not applicable.		ives or respective national laws	s. Classification	Conc.
	COMPOSITION/INFOR Substances Not applicable. Mixtures	MATION ON INGREDIENTS	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component	CAS No. EC No. 26628-22-8 247-852-7	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1%	CAS No. EC No. 26628-22-8 247-852-7	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1%	CAS No. EC No. 26628-22-8 247-852-7	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid m	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- S measures	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid m General Advice	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- S measures	Index No.	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid m General Advice Consult a doctor and show If Inhaled	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- S neasures w this safety data sheet.	Index No. 1 011-004-00-	Classification	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid m General Advice Consult a doctor and show If Inhaled	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- S neasures w this safety data sheet. monitor breathing. If breathing becomes difficu	Index No. 1 011-004-00-	Classification 7 Not hazardous at this concentration	
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid in General Advice Consult a doctor and show If Inhaled Remove to fresh air and in In Case of Skin Contact	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- 3 neasures w this safety data sheet. monitor breathing. If breathing becomes difficu	Index No. 1 011-004-00- ult, give oxygen. If breathing sto	Classification 7 Not hazardous at this concentration	< 0.1%
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid in General Advice Consult a doctor and show If Inhaled Remove to fresh air and in In Case of Skin Contact	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- 3 neasures w this safety data sheet. monitor breathing. If breathing becomes difficu	Index No. 1 011-004-00- ult, give oxygen. If breathing sto	Classification 7 Not hazardous at this concentration ops, give artificial respiration. Consult a doctor.	< 0.1%
	COMPOSITION/INFOR Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURES Description of first aid in General Advice Consult a doctor and show If Inhaled Remove to fresh air and in In Case of Skin Contact Immediately wash skin wi In Case of Eye Contact	MATION ON INGREDIENTS CAS No. EC No. 26628-22-8 247-852- 3 neasures w this safety data sheet. monitor breathing. If breathing becomes difficu	Index No. 1 011-004-00- ult, give oxygen. If breathing sto least 15 minutes. Remove cont	Classification 7 Not hazardous at this concentration ops, give artificial respiration. Consult a doctor.	< 0.1%

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. ACCIDENTIAL 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 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.

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	Lyophilized white powder or 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.				
	pН	No data available.	Solubility	No data available.				
	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 Flammabili							
	Explosive Limits	No data available.	Oxidizing Properties	No data available.				
9.2	Other safety information							
	No data available.							
10.	STABILITY AND REACT	IVITY						
10.1	Reactivity							
	Stable under recommended	I transport or storage conditions.						
10.2	Chemical stability							
	Stable under recommended	storage conditions						
10.3	Possibility of hazardous re							
.0.5	-			ions or motorials listed below				
40.4		t occur under normal transport or storage conditions.	Decomposition may occur on exposure to condit	INTO OF THALEHAIS HOLEU DEIDW.				
10.4	Conditions to avoid							
	Heat, moisture.							
10.5	Incompatible materials							
	Strong acids/alkalis, strong	oxidizing/reducing agents.						
10.6	Hazardous decompositior) products						
	Strong acids/alkalis, strong	oxidizing/reducing agents.						
11.	TOXICOLOGICAL INFOR	(MATION						
11.1	Information on toxicologic	cal effects						
	Acute Toxicity							
	Classified based on availab	le data.						
	Skin Corrosion / Irritation							
	Classified based on availab	le data.						
	Serious Eye Damage / Irrit							
	Classified based on availab							
	Respiratory or Skin Sensi							
	Classified based on availab	ie data.						
	Germ Cell Mutagenicity							
	Classified based on availab	le data.						
	Carcinogenicity							
	Classified based on availab	le data.						
	Reproductive Toxicity							
	Classified based on availab	le data.						
	Specific Target Organ Tox	cicity - Single Exposure						
	Classified based on availab	le data.						
	Specific Target Organ Tox	kicity - Repeated Exposure						
	Classified based on availab							
	Aspiration Hazard							
	Classified based on availab	le data						
	Symptoms / Routes of Exp		tightness in the chest					
	Inhalation:	There may be irritation of the throat with a feeling of	นฐานาธรร III แทย เปมตรเ.					
	Ingestion: There may be irritation of the throat.							
	-	There may be mild irritation at the site of as its it	Skin: There may be mild irritation at the site of contact.					
	-	There may be mild irritation at the site of contact. There may be irritation and redness.						

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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.

1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF	THE COMPANY/UNDERTAKIN	IG				
1.1	Product Identifiers							
	Product Name:	Streptavidin-PE (contains Proclin 30	0 mixture)					
1.2	Relevant identified us	es of the substance or mixture and use	s 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 Bi	and Telephone:	1-800-343-7475				
		614 McKinley Place NE	Fax:	1-612-656-4400				
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com				
			Email address:	info@bio-techne.com				
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722				
		Toronto, ON M8Z4E6	Fax:	902-827-6402				
			Email address:	Canada.inquiries@bio-techne.com				
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449				
	onited Kingdom.	Abingdon Science Park	Fax:	44 (0)1235 533420				
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com				
	China:	1193 Changning Road	Telephone:	86-400-821-3475				
		Unit 1901, Raffles Changning Office		76 (021)52371001				
1.4	Emergency Telephone	Shanghai, China	Email address:	techsupport.cn@bio-techne.com				
1.4				w or pight: Within U.S. 1,800,262,8200 Wo	rldwido 1 702 711 5500			
		Emergency Tel: 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 IDENTIFIC	ATION						
2.1	Classification of the s	ubstance or mixture						
	Classification accordi	Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]						
	Sensitization, skin - Cat	tegory 1						
2.2	Label Elements							
	Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]							
	Pictogram(s):	\wedge						
		\checkmark						
	Signal Word:	Warning						
	Hazard Statement(s):							
	H317	May cause an allergic skin re	eaction.					
	Precautionary Statemen	nt(s):						
	P261	Avoid breathing dust/fumes/						
	P272 P280	0	should not be allowed out of the ctive clothing/eye protection/face	•				
	P302+352	IF ON SKIN: Wash with plen						
	P333+313		s: Get medical advice/attention.					
	P362+P364 P321	Specific treatment (see secti	ng and wash it before reuse. on 4 on this SDS).					
	P363	Wash contaminated clothing	before reuse.					
	P501	Dispose of contents/containe	er in accordance with local/regiona	l/national/international regulations.				
2.3	Other Hazards - None							
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS						
3.1	Substances							
	Not applicable.							
3.2	Mixtures							
	Component	CAS No. EC	No. Index No	Classification	Conc.			

Proclin 300 Mixture <0.1% (active 96118-96-6

Conc.

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.

					,			
1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF TI	IE COMPANY/UNDERTAKIN	G				
1.1	Product Identifiers							
	Product Name:	Microparticle Diluent (contains Proclin	300 mixture)					
1.2	Relevant identified us	es of the substance or mixture and uses	advised against					
	Identified Uses:	For research use only.						
1.3	Details of the supplier	r of the safety data sheet						
	Company:	R&D Systems, Inc. a Bio-Techne Brai	nd Telephone:	1-800-343-7475				
		614 McKinley Place NE	Fax:	1-612-656-4400				
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com				
			Email address:	info@bio-techne.com				
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722				
		Toronto, ON M8Z4E6	Fax:	902-827-6402				
			Email address:	Canada.inquiries@bio-techne.com				
	United Kingdom:	19 Barton Lane	Talanhana	44 (0)1225 520440				
	United Kingdom:	Abingdon Science Park	Telephone: Fax:	44 (0)1235 529449 44 (0)1235 533420				
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com				
	China:	1193 Changning Road	Telephone:	86-400-821-3475				
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001				
	Careeron on Tolonkon	Shanghai, China	Email address:	techsupport.cn@bio-techne.com				
1.4	Emergency Telephone				14 4 700 744 5500			
				y or night: Within U.S. 1-800-262-8200 World	WIDE 1-703-741-5500			
	Bio-Techne Tel: US: 61	2-379-2956 or 800-343-7475 / Europe: +44	0)1235-5294497 China 86-400-	821-3475				
2.	HAZARDS IDENTIFIC	ATION						
2.1	Classification of the s	ubstance or mixture						
	Classification accordi	ing to Regulation (EC) No 1272/2008 [GHS	/CLP] or 29 CFR 1910.1200 [O	SHA]				
	Sensitization, skin - Cat	tegory 1						
2.2	Label Elements							
	Labeling according to	Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]						
	Pictogram(s):	\wedge						
	Signal Word:	Warning						
	Hazard Statement(s):							
	H317	May cause an allergic skin rea	ction.					
	Precautionary Statement	nt(s):						
	P261	Avoid breathing dust/fumes/ga	s/mist/vapors/spray.					
	P272	•	hould not be allowed out of the	•				
	P280 P302+352	Wear protective gloves/protect IF ON SKIN: Wash with plenty	ive clothing/eye protection/face p of soap and water	protection.				
	P333+313	If skin irritation or rash occurs:						
	P362+P364	Take off contaminated clothing						
	P321 P363	Specific treatment (see section Wash contaminated clothing b						
	P501			l/national/international regulations.				
2.3	Other Hazards - None							
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS						
3.1	Substances							
	Not applicable.							
3.2	Mixtures							
	Component	CAS No. EC N	o. Index No	. Classification	Conc			

Proclin 300 Mixture <0.1% (active 96118-96-6

Conc.

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.

1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF THE C	OMPANY/UNDERTAKIN	G					
1.1	Product Identifiers	Product Identifiers							
	Product Name:	Biotin Antibody Diluent 2 (contains Proclin 3	300 mixture)						
1.2	Relevant identified us	es of the substance or mixture and uses advis	ed 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	Telephone:	1-800-343-7475					
		614 McKinley Place NE	Fax:	1-612-656-4400					
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com					
			Email address:	info@bio-techne.com					
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722					
		Toronto, ON M8Z4E6	Fax:	902-827-6402					
			Email address:	Canada.inquiries@bio-techne.com					
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449					
	onited Ringdom.	Abingdon Science Park	Fax:	44 (0)1235 533420					
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com					
	China:	1193 Changning Road	Telephone:	86-400-821-3475					
		Unit 1901, Raffles Changning Office Shanghai, China	Fax: Email address:	76 (021)52371001 techsupport.cn@bio-techne.com					
1.4	Emergency Telephone		Email addross.						
		emical emergency, spill, leak, fire, exposure, or ac	cident call CHEMTREC day	or night: Within U.S. 1-800-262-8200 Worldwi	de 1-703-741-5500				
		2-379-2956 or 800-343-7475 / Europe: +44(0)123		-					
2.	HAZARDS IDENTIFIC	ATION							
2.1	Classification of the s	Classification of the substance or mixture							
	Classification accordi	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]								
	Pictogram(s):	\wedge							
	Signal Word:	Warning							
	Hazard Statement(s):								
	H317	May cause an allergic skin reaction.							
	Precautionary Statemer	Precautionary Statement(s):							
	P261								
	P272	Contaminated work clothing should		•					
	P280 P302+352	Wear protective gloves/protective clothing/eye protection/face protection. 52 IF ON SKIN: Wash with plenty of soap and water.							
	P333+313	If skin irritation or rash occurs: Get n							
	P362+P364 P321	Take off contaminated clothing and Specific treatment (see section 4 on							
	P363	P363 Wash contaminated clothing before reuse.							
2.3	P501 Other Hazards - None	Dispose of contents/container in acc	cordance with local/regional	mational/international regulations.					
2.3	Other Hazarus - None								
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS							
3.1	Substances								
	Not applicable.								
3.2	Mixtures								
	Component	CAS No. EC No.	Index No.	Classification	Conc.				

Proclin 300 Mixture <0.1% (active 96118-96-6

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. 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 th	hroat 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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

Copyright © 2018 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.

Proclin 300 Mixture <0.1% (active 96118-96-6

Conc.

H317

1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND O	F THE COMPAN	IY/UNDERTAKING	ì	
1.1	Product Identifiers					
	Product Name:	Calibrator Diluent RD6-65 (contai	ns Proclin 300 mix	(ture)		
1.2	Relevant identified use	es of the substance or mixture and u	ses advised agai	nst		
	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 Te	lephone:	1-800-343-7475	
		614 McKinley Place NE	Fa	x:	1-612-656-4400	
		Minneapolis, MN 55413, USA		ernet:	www.rndsystems.com	
			En	nail address:	info@bio-techne.com	
	Canada:	21 Canmotor Ave	Те	lephone:	1-855-668-8722	
		Toronto, ON M8Z4E6	Fa	x:	902-827-6402	
			En	nail address:	Canada.inquiries@bio-techne.com	
	United Kingdom:	19 Barton Lane	Те	lephone:	44 (0)1235 529449	
	g	Abingdon Science Park	Fa		44 (0)1235 533420	
		Abingdon, OX14 3NB	En	nail address:	info.emea@bio-techne.com	
					~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
	China:	1193 Changning Road Unit 1901, Raffles Changning Off		ephone:	86-400-821-3475 76 (021)52371001	
		Shanghai, China		nail address:	techsupport.cn@bio-techne.com	
1.4	Emergency Telephone	-				
			ure, or accident c	all CHEMTREC day	or night: Within U.S. 1-800-262-8200 Worl	Idwide 1-703-741-5500
		2-379-2956 or 800-343-7475 / Europe:			•	
2.	HAZARDS IDENTIFIC	ATION				
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 - Cat	egory 1				
2.2	Label Elements					
	Labeling according to	Regulation (EC) No 1272/2008 [GHS/	CLP]			
	Pictogram(s):	\wedge				
		\checkmark				
	Signal Word:	Warning				
	Hazard Statement(a)					
	Hazard Statement(s):	May aquad an alleraid akir	reaction			
	H317	May cause an allergic skir	reaction.			
	Precautionary Statemer	nt(s):				
	P261 P272	Avoid breathing dust/fume Contaminated work clothing			vorkplace	
	P272 P280		•		•	
	P302+352					
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.				
	P362+P364 P321	Take off contaminated clothing and wash it before reuse. Specific treatment (see section 4 on this SDS).				
	P363	Wash contaminated clothing	ng before reuse.	,		
2.3	P501 Other Hazards - None	Dispose of contents/conta	iner in accordance	e with local/regional/r	national/international regulations.	
2.3	Other Hazards - None					
3.	COMPOSITION/INFO	RMATION ON INGREDIENTS				
3.1	Substances					
	Not applicable.					
3.2	Mixtures					
	Component	CAS No.	EC No.	Index No.	Classification	

613-167-00-5

4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient	No data available. No data available. No data available. No data available. No data available. No data available.
	Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	No data available. No data available. No data available. No data available. No data available.	Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. No data available. No data available. No data available. 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 th	hroat 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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.

					2
1.	IDENTIFICATION OF	THE SUBSTANCE/MIXTURE AND OF T	HE COMPANY/UNDERTAKIN	G	
1.1	Product Identifiers				
	Product Name:	Wash Buffer Concentrate (contains P	roclin 300 mixture)		
1.2	Relevant identified us	es of the substance or mixture and uses	advised against		
	Identified Uses:	For research use only.			
1.3	Details of the supplier	r of the safety data sheet			
	Company:	R&D Systems, Inc. a Bio-Techne Bra	and Telephone:	1-800-343-7475	
		614 McKinley Place NE	Fax:	1-612-656-4400	
		Minneapolis, MN 55413, USA	Internet:	www.rndsystems.com	
			Email address:	info@bio-techne.com	
	Canada:	21 Canmotor Ave	Telephone:	1-855-668-8722	
		Toronto, ON M8Z4E6	Fax:	902-827-6402	
			Email address:	Canada.inquiries@bio-techne.com	I
	United Kingdom:	19 Barton Lane	Telephone:	44 (0)1235 529449	
	Onnea Kingdom.	Abingdon Science Park	Fax:	44 (0)1235 533420	
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com	
		-			
	China:	1193 Changning Road	Telephone:	86-400-821-3475	
		Unit 1901, Raffles Changning Office	Fax:	76 (021)52371001	
1.4	Emergency Telephone	Shanghai, China	Email address:	techsupport.cn@bio-techne.com	
1.4				w or night Within LLS 4 800 262 8200 W	orduvido 1 702 711 5500
		emical emergency, spill, leak, fire, exposure 2-379-2956 or 800-343-7475 / Europe: +44			Jildwide 1-703-741-5500
	BIO-TECHNE TEL 03. 01	2-379-2930 01 800-343-74757 Eulope. +4-	(0)1235-529449 / Chillia 60-400-	021-0470	
2.	HAZARDS IDENTIFIC	ATION			
2.1	Classification of the s	substance or mixture			
	Classification accordi	ing to Regulation (EC) No 1272/2008 [GH	S/CLP] or 29 CFR 1910.1200 [O	SHA]	
	Sensitization, skin - Cat	tegory 1			
2.2	Label Elements				
		Regulation (EC) No 1272/2008 [GHS/CLI	2]		
	Pictogram(s):		-		
	r iciogram(s).				
	Signal Words	Worning			
	Signal Word:	Warning			
	Hazard Statement(s):				
	H317	May cause an allergic skin rea	action.		
	Precautionary Statemer	nt(s):			
	P261	Avoid breathing dust/fumes/g	as/mist/vapors/sprav.		
	P272	Contaminated work clothing	should not be allowed out of the		
	P280		tive clothing/eye protection/face	protection.	
	P302+352 P333+313	IF ON SKIN: Wash with plenty If skin irritation or rash occurs	Get medical advice/attention.		
	P362+P364	Take off contaminated clothin			
	P321	Specific treatment (see sectio			
	P363 P501	Wash contaminated clothing to Dispose of contents/container		l/national/international regulations.	
2.3	Other Hazards - None				
•	COMPOSITION//NCC				
3.		RMATION ON INGREDIENTS			
3.1	Substances				
	Not applicable.				
3.2	Mixtures	01011			•
	Component	CAS No. EC I	No. Index No	. Classification	Conc.

Proclin 300 Mixture <0.1% (active 96118-96-6

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4. FIRST AID MEASURES

Description of first aid measures

General Advice

4.1

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. ACCIDENTIAL 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 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.

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 Odor Odor Threshold pH Melting / Freezing Point Boiling Point / Range	Lyophilized white powder or clear liquid Little to none No data available. No data available. No data available. No data available.	Vapor Pressure Vapor Density Relative Density Solubility Partition Coefficient	No data available. No data available. No data available. No data available. No data available. No data available.
	Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper / Lower Flammability or Explosive Limits	No data available. No data available. No data available. No data available. No data available.	Auto ignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available. No data available. No data available. No data available. 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 th	hroat with a feeling of tightness in the chest.
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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.

14.6 Special precautions for users

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

Additional Transport Information

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

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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.