RD SYSTEMS a biotechne brand

1.	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING					
1.1	Product Identifiers					
	Product Name: Catalog Number:	Human Lipocalin-2/NGAL Magnetic Luminex LHK1757	Performance Assay			
	Components:	Microparticle Concentrate (contains Proclin 3 Biotin-Antibody Concentrate (contains Sodiu	,			
1.2	Relevant identified us	es of the substance or mixture and uses advise	,			
	Identified Uses:					
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:	461 North Service Rd West	Telephone:	1-855-668-8722		
		Unit B37	Fax:	902-827-6402		
		Oakville, ON L6M 2V5	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		
1.4	Emergency Telephone	e Number				
	Emergency Tel:	US: 612-379-2956 or 800-343-7475 / Europe	e: +44(0)1235-529449			

2. HAZARDS IDENTIFICATION

See additional safety data sheets.

RD SYSTEMS a biotechne brand

1.							
	IDENTIFICATION OF THE S	SUBSTANCE/MIXTURE AND	O OF THE COMPAN	IY/UNDERTAKING			
1.1	Product Identifiers						
	Product Name: Microparticle Concentrate (contains Proclin 300)						
1.2	Relevant identified uses of the substance or mixture and uses advised against						
	Identified Uses: For research use only.						
1.3	Details of the supplier of the	e safety data sheet					
		R&D Systems, Inc. a Bio-Tech		ephone:	1-800-343-7475		
		614 McKinley Place NE	Fa		1-612-656-4400		
		Minneapolis, MN 55413, USA		ernet: nail address:	www.rndsystems.com info@bio-techne.com		
	Canada:	461 North Service Rd West	Те	ephone:	1-855-668-8722		
		Unit B37	Fa		902-827-6402		
		Oakville, ON L6M 2V5	En	ail address:	Canada.inquiries@bio-techne.com		
	United Kingdom:	19 Barton Lane	Те	lephone:	44 (0)1235 529449		
		Abingdon Science Park	Fa	K:	44 (0)1235 533420		
		Abingdon, OX14 3NB	Em	ail address:	info.emea@bio-techne.com		
1.4	Emergency Telephone Num	ber					
		I, leak, fire, exposure, or accid 00-424-9300. Outside USA and			controd)		
		00-424-9300. Outside USA and					
2.	HAZARDS IDENTIFICATIO	N					
2.1	Classification of the substa	nce or mixture					
	Classification according to	Regulation (EC) No 1272/200	08 [GHS/CLP] or 29 (CFR 1910.1200 [OSHA	N]		
	Sensitization, skin - Category	1					
2.2	Label Elements						
	Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]						
	Pictogram(s):						
	Signal Word: Warning						
	-						
	Hazard Statement(s):	May aquaa an allargia	akin reaction				
	H317 May cause an allergic skin reaction.						
	Precautionary Statement(s):						
	P261 Avoid breathing dust/fumes/gas/mist/vapours/spray. P272 Contaminated work clothing should not be allowed out of the workplace.						
	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 Take off contaminated clothing and wash it before reuse.						
2.3	Other Hazards - None						
3.	COMPOSITION/INFORMA	TION ON INGREDIENTS					
3.1	Substances						
	Not applicable.						
3.2	Mixtures						
	Component	CAS No.	EC No.	Index No.	Classification	Conc.	
	Proclin 300 Mixture = <0.1% ingredients)		-		H317		
	Mixture of 5-Chloro-2-Methyl-	4- 55965-84-9		613-167-00-5	5	<0.1%	
	Isothiazolin-3-One (26172-55 and 2-Methyl-4-Isothiazolin-3 (2682-20-4)	-4)					

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

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

In Case of Skin Contact

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

In Case of Eye Contact

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

If Swallowed

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

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters

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

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

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 oxidising/reducing agents.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidising/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.

There may be irritation of the throat. Ingestion: Skin:

There may be mild irritation at the site of contact.

Eyes: There may be irritation and redness.

Delayed / Immediate Effects:

Additional Information

No known symptoms.

Classified based on available data

12. **ECOLOGICAL INFORMATION**

12.1 Toxicity

No data available.

Persistence and degradability 12.2

No data available.

12.3 **Bioaccumulative potential**

No data available. Mobility in soil 12.4

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.

Further Information

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

End of safety data sheet

RD SYSTEMS a biotechne brand

	IDENTIFICATION OF							
1	Product Identifiers							
	Product Name:	Biotin-Antibody Concentrate (con	ntains Sodium Azide)					
1.2	Relevant identified uses of the substance or mixture and uses advised against							
	Identified Uses: For research use only.							
1.3	Details of the supplier of the safety data sheet							
	Company:	R&D Systems, Inc. a Bio-Techne	Techne Brand Telephone:		-800-343-7475			
		614 McKinley Place NE	Fax:		-612-656-4400			
		Minneapolis, MN 55413, USA	Intern		ww.rndsystems.com nfo@bio-techne.com			
			2					
	Canada:	461 North Service Rd West	Telep		-855-668-8722			
		Unit B37	Fax:		02-827-6402			
		Oakville, ON L6M 2V5	Email	address: C	anada.inquiries@bio-techne.com			
	United Kingdom:	19 Barton Lane	Telep	hone: 4	4 (0)1235 529449			
		Abingdon Science Park	Fax:	4	4 (0)1235 533420			
		Abingdon, OX14 3NB	Email	address: ir	nfo.emea@bio-techne.com			
4	Emergency Telephone	Number						
	Emergency Tel:	US: 612-379-2956 or 800-343-74	475 / Europe: +44(0)	1235-529449				
	HAZARDS IDENTIFIC							
1	Classification of the substance or mixture							
	This substance does not meet the classification criteria of the EC Directives 67/548/EEC, 1999/45/EC, 1272/2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].							
	This substance does no	t meet the classification criteria of the E	EC Directives 67/548/	EEC, 1999/45/EC, 1272/	2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
2	This substance does no Label Elements	t meet the classification criteria of the E	EC Directives 67/548/	EEC, 1999/45/EC, 1272/	2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
	Label Elements The product does not ne	t meet the classification criteria of the E eed to be labelled in accordance with E			2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
	Label Elements				2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
.3	Label Elements The product does not no Other Hazards - None				2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
.3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO	eed to be labelled in accordance with E			2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
.2 .3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances	eed to be labelled in accordance with E			2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable.	eed to be labelled in accordance with E			2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].			
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures	eed to be labelled in accordance with E	EC directives or respe	ctive national laws.		Conc		
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component	CAS No.	EC directives or respe	ctive national laws.	Classification	<u>Conc.</u>		
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures	CAS No.	EC directives or respe	ctive national laws.		Conc. < 0.1 %		
.3 1 2	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component	RMATION ON INGREDIENTS CAS No. 26628-22-8	EC directives or respe	ctive national laws.	Classification			
.3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1%	CAS No. 26628-22-8	EC directives or respe	ctive national laws.	Classification			
3 1 2	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE	CAS No. 26628-22-8	EC directives or respe	ctive national laws.	Classification			
	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice	CAS No. 26628-22-8	EC directives or respe	ctive national laws.	Classification			
3 1 2	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice	CAS No. 26628-22-8 ES measures	EC directives or respe	ctive national laws.	Classification			
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled	RMATION ON INGREDIENTS CAS No. 26628-22-8 S measures ow this safety data sheet.	EC No. 247-852-1	Index No. 011-004-00-7	Classification			
3	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and In Case of Skin Contact	CAS No. 26628-22-8 CAS NO. 26628-26 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678	EC directives or respectives or respectives or respectives of the second	Index No. 011-004-00-7	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor.	< 0.1 %		
3 1 2	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and In Case of Skin Contact	CAS No. 26628-22-8 CAS NO. 26628-26 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678 CAS NO. 2678	EC directives or respectives or respectives or respectives of the second	Index No. 011-004-00-7	Classification Not hazardous at this concentration.	< 0.1 %		
3	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and In Case of Skin Contag Immediately wash skin fi In Case of Eye Contage	CAS No. 26628-22-8 CAS No. 26628-22-8 CAS No. 26628-22-8 CAS No. CAS N	EC directives or respectives of respectives of the second	Index No. 011-004-00-7	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor.	< 0.1 %		
3 1 2	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and Im Case of Skin Contae Immediately wash skin with copious amounts Flush with copious amounts	CAS No. CAS No. 26628-22-8 S measures ow this safety data sheet. I monitor breathing. If breathing becom t with copious amounts of soap and wate	EC directives or respectives of respectives of the second	Index No. 011-004-00-7	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor.	< 0.1 %		
3	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and Im Case of Skin Contae Immediately wash skin with copious amo If Swallowed	CAS No. CAS No. 26628-22-8 CS measures ow this safety data sheet. I monitor breathing. If breathing becom t with copious amounts of soap and wate t unts of water for at least 15 minutes. C	EC directives or respectives or respectives of the second	Index No. 011-004-00-7 en. If breathing stops, giv tes. Remove contaminate	Classification	< 0.1 %		
3 1 2 1	Label Elements The product does not no Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and Im Case of Skin Contaat Immediately wash skin In Case of Eye Contact Flush with copious amo If Swallowed Rinse mouth with water	CAS No. 26628-22-8 CAS No.	EC directives or respectives or respectives of the second	Index No. 011-004-00-7 en. If breathing stops, giv tes. Remove contaminate	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor.	< 0.1 %		
3 1 2 1	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh if Inhaled Remove to fresh air and In Case of Skin Contae Immediately wash skin In Case of Eye Contace Flush with copious amo If Swallowed Rinse mouth with water Most important sympti	eed to be labelled in accordance with E RMATION ON INGREDIENTS CAS No. 26628-22-8 CS measures ow this safety data sheet. I monitor breathing. If breathing becom t with copious amounts of soap and wate t unts of water for at least 15 minutes. C Do not induce vomiting unless directe oms and effects, both acute and dela	EC directives or respectives or respectives of the second	Index No. 011-004-00-7 en. If breathing stops, giv tes. Remove contaminate personnel. Never give a	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor. ed clothing and shoes and wash before reuse. Consulting by mouth to an unconscious person. Consulting by mouth to an unconscious person. Consulting by mouth to an unconscious person.	< 0.1 %		
3 1 2	Label Elements The product does not ne Other Hazards - None COMPOSITION/INFO Substances Not applicable. Mixtures Component Sodium Azide < 0.1% FIRST AID MEASURE Description of first aid General Advice Consult a doctor and sh If Inhaled Remove to fresh air and Immediately wash skin In Case of Skin Contac Immediately wash skin In Case of Eye Contac Flush with copious amo If Swallowed Rinse mouth with water Most important sympt To the best of our know	CAS No. 26628-22-8 CAS No.	EC directives or respe- EC No. 247-852-1 ues difficult, give oxyge er for at least 15 minu consult a doctor. ed to do so by medical ayed cological properties ha	Index No. 011-004-00-7 en. If breathing stops, giv tes. Remove contaminate personnel. Never give a	Classification Not hazardous at this concentration. e artificial respiration. Consult a doctor. ed clothing and shoes and wash before reuse. Consulting by mouth to an unconscious person. Consulting by mouth to an unconscious person. Consulting by mouth to an unconscious person.	< 0.1 %		

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 sul	bstance or mixture					
	In combustion, may emit toxic fumes.						
5.3	Precautions for fire-fighters						
	Wear suitable protective clothing to pre	event contact with skin and eyes and self-contained	breathing apparatus.				
6.	ACCIDENTIAL RELEASE MEASURES						
6.1	Personal precautions, protective eq	uipment and emergency procedures					
	Do not take action without suitable proto or gas.	tective clothing - see section 8 of SDS. Evacuate p	ersonnel to safe areas. Ensure ad	lequate ventilation. Avoid breathing vapors, mist, dust			
6.2	Environmental precautions						
	Do not let product enter drains.						
6.3	Methods and materials for containm	nent and cleaning up					
		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							
7.1	Precautions for safe handling	in and elething. Avoid the formation of duct and ap	anala. Llao in a wall ventilated are	ea. Keep away from sources of ignition. Avoid prolonged			
	or repeated exposure.	-		a. Reep away nom sources of ignition. Avoid prolonged			
7.2	Conditions for safe storage, includir						
		ep 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 occupation	onal 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 PROF	PERTIES					
9.1	Information on basic physical and c						
5.1	Appearance	Lyophilized white powder or clear liquid	Vapor Pressure	No data available.			
	Odor	Little to none	Vapor Density	No data available.			
	Oder Threshold	No doto ovoilable	Polotivo Donoitu	No doto ovoilable			

Appearance	Eyophilized white powder of clear liquid	Vapor i leasure	
Odor	Little to none	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
рН	No data available.	Solubility(ies)	No data available.
Melting / Freezing Point	No data available.	Partition Coefficient	No data available.
Boiling Point / Range	No data available.	Autoignition 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.

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 oxidising/reducing agents.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidising/reducing agents.

TOXICOLOGICAL INFORMATION 11.

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

There may be irritation of the throat with a feeling of tightness in the chest.
There may be irritation of the throat.
There may be mild irritation at the site of contact.
There may be irritation and redness.

Delayed / Immediate No known symptoms. Effects:

Additional Information

Classified based on available data

12. **ECOLOGICAL INFORMATION**

12.1 Toxicity

No data available.

Persistence and degradability 12.2

No data available.

12.3 **Bioaccumulative 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

15.1

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.

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

TSCA (Toxic Substances Control Act) : Listed SARA 313 : Listed SARA 311/312 : Listed CERCLA Reportable Quantity : 1000 lbs. California Proposition 65 : Not applicable.

15.2 Chemical safety assessment

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

16. OTHER INFORMATION

Further Information

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

End of safety data sheet