

SAFETY DATA SHEET

United States		
Section 1. Identification Product name	GST SpinTrap™,	50 columns
Catalogue Number	28952359	9 0 2 8 9 5 2 3 5 9
Other means of identification Product type	Not available. Liquid.	
Relevant identified uses of the su	ubstance or mixture and uses advis	ed against
Identified uses Laboratory chemicals Analytical chemistry. Scientific research and developm Industrial applications: Analytical	ent chemistry. Laboratory use. Scientific r	esearch and development.
Supplier	Cytiva Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 0800 515 313	Cytiva USA 100 Results Way Marlborough, MA 01752 1-800-526-3593
In case of emergency	INFOTRAC - 24 Hour number: 1-800 Outside of the United States, call 24	0-535-5053 Hour number: 001-352-323-3500 (Call Collect)
Section 2. Hazards ident	ification	
OSHA/HCS status	CFR 1910.1200), this SDS contains	hazardous by the OSHA Hazard Communication Standard (29 valuable information critical to the safe handling and proper use retained and available for employees and other users of this
Classification of the substance or mixture	Not classified.	
GHS label elements		
Signal word	No signal word.	
Hazard statements	No known significant effects or critic	al hazards.
Precautionary statements		
Prevention	Not applicable.	
Response	Not applicable.	
Storage	Not applicable.	
Disposal	Not applicable.	
Hazards not otherwise classified	None known.	



Section 3. Composition/information on ingredients

Substance/mixture	Mixture	
Other means of identification	Not available.	
CAS number/other identifiers		
CAS number	Not applicable.	

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical
	attention if symptoms occur.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/effe	cts, acute and delayed
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Over-exposure signs/sympto	<u>ms</u>
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.
Indication of immediate medic	al attention and special treatment needed, if necessary
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.
See toxicological information ((Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	No specific data.
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for contain	inment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water- soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
Section 7. Handling and	storage

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store between the following temperatures: 4 to 30°C (39.2 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

<u>Control parameters</u>	
Occupational exposure limits None.	
Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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Section 9. Physical and chemical properties

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<u>Appearance</u>							
Physical state	Liquid.						
Color	White. White to yello	owish.					
Odor	Odorless.						
Odor threshold	Not available.						
рН	Not available.						
Melting point/freezing point	Not available.						
Boiling point, initial boiling point, and boiling range	Not available.						
Flash point	Not applicable.						
Burning time	Not applicable.						
Burning rate	Not applicable.						
Evaporation rate	Not available.						
Flammability	Not available.						
Lower and upper explosive (flammable) limits	Not available.						
Vapor pressure	Not available.						
		Vapor Pressure at 20°C			Vapor pressure at 50°C		
	Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
	water	23.8	3.2				
	Glutathione Sepharose 4B (highly cross-linked agarose)	0	0				
Relative vapor density	Not available.						
Relative density	Not available.						
Solubility(ies)							
	Not available.						
Solubility in water	Not available.						
Partition coefficient: n-octand water	ol/ Not applicable.						
Auto-ignition temperature	Not available.						
Decomposition temperature							
	Not available.						
SADT	Not available. Not available.						
SADT Viscosity							
-	Not available.						
Viscosity	Not available. Not available.						

Section 10. Stability and reactivity

Reactivity Chemical stability	No specific test data related to reactivity available for this product or its ingredients. The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary Very low toxicity to humans or animals.

Irritation/Corrosion

Not available.

Sensitization

Not available.



GST Spintrap, 50 columns	
<u>Mutagenicity</u> Not available.	
Conclusion/Summary	No known significant effects or critical hazards.
Carcinogenicity Not available.	
Conclusion/Summary	Very low toxicity to humans or animals.
Reproductive toxicity Not available.	
Conclusion/Summary	No known significant effects or critical hazards.
<u>Teratogenicity</u> Not available.	
Conclusion/Summary	No known significant effects or critical hazards.
Specific target organ toxicity (s Not available.	ingle exposure)
Specific target organ toxicity (r Not available.	epeated exposure)
Aspiration hazard Not available.	
Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation.
Potential acute health effects	
Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact Ingestion	No known significant effects or critical hazards. No known significant effects or critical hazards.
•	II, chemical and toxicological characteristics
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.
Delayed and immediate effects a	nd also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
Long term exposure	N. A second and a
Potential immediate effects Potential delayed effects	Not available. Not available.
Potential chronic health effects Not available.	
Conclusion/Summary	Very low toxicity to humans or animals.
Conclusion/Summary General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Numerical measures of toxicity	
Acute toxicity estimates	
N/A	



Section 12. Ecological information **Toxicity** Not available. Persistence and degradability Not available. **Bioaccumulative potential** Not available. Mobility in soil Soil/water partition coefficient (K Not available. oc) Other adverse effects No known significant effects or critical hazards. Section 13. Disposal considerations **Disposal methods** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Section 14. Transport information Product is not regulated as dangerous goods for transport. Section 15. Regulatory information

U.S. Federal regulations	TSCA 8(a) CDR Exempt/Partial exemption: Not determined		
	Clean Water Act (CWA) 311: disodium hydrogenorthophosphate		

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed

SARA 302/304

Composition/information on	ingredients
No products were found.	
SARA 304 RQ	Not applicable.
SARA 311/312 Classification	Not applicable.
Composition/information on ingredients No products were found.	
State regulations	
Massachusetts	None of the components are lis

Massachusetts	None of the components are listed.
New York	None of the components are listed.
New Jersey	None of the components are listed.
Pennsylvania	None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

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Not listed

Rotterdam Convention on Prior Informed Consent (PIC) Not listed. **UNECE Aarhus Protocol on POPs and Heavy Metals** Not listed. Inventory list **United States** At least one component is not listed. Canada inventory All components are listed or exempted. Section 16. Other information National Fire Protection Association (U.S.A.) Flammability Instability/Reactivity Health Special hazards Procedure used to derive the classification Classification Justification Not classified. **History** Date of printing 1/16/2023 Date of issue/Date of revision 1/16/2023 Date of previous issue 7/15/2020 Version 8 sds_author@cytiva.com Key to abbreviations ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations References Not available. Indicates information that has changed from previously issued version.

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