

SAFETY DATA SHEET

1. Identification

Product identifier	SPECTROZYME® tPA Bulk, 0.5 grams	
Other means of identification		
Product code	444B	
Recommended use	Research use only.	
Recommended restrictions	Use in accordance with supplier's recommendation	ndations.
Manufacturer/Importer/Supplier/	Distributor information	
Corporate Headquarters	BioMedica Diagnostics Inc. 94 Wentworth Road, PO Box 1030 Windsor, Nova Scotia CANADA BON 2T0	
Contact person	Corporate Phone: 1-902-798-5105 Corporate Fax: 1-902-798-1025 Email: info@biomedicadiagnostics.com	Website: www.biomedicadiagnostics.com
Emergency Telephone Numbers	US, Canada, Puerto Rico & Virgin Islands 1-800-2 International+1-813-248-0585 Brazil 0-800-591-6042 India 000-800-100-4086	55-3924 Australia 1-300-954-583 China 400-120-0751 Mexico 01-800-099-0731
Contract number	MIS9591327	
2. Hazard(s) identification		
Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation Specific target organ toxicity, single exposur	Category 2 e Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	
Label elements		
Signal word	Warning	
Hazard statement	Causes skin irritation. Causes serious eye ir	ritation. May cause respiratory irritation.
Precautionary statement		
Prevention	Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves. Wear eye/face protection.	
Response	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.	
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	

Hazard(s) not otherwise classified (HNOC)

3. Composition/information on ingredients

Substances

None known.

Chemical name	Common name and synonyms	CAS number	%
Methylsulfonyl-D-cyclohexylala nyl- glycyl-arginine paranitroaniline acetate		None	100
Composition comments	All concentrations are in percent by weight up percent by volume.	nless ingredient is a gas. Gas	concentrations are in
4. First-aid measures			
Inhalation	Remove victim to fresh air and keep at rest in CENTER or doctor/physician if you feel unwe		eathing. Call a POISO
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.		
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.		
Ingestion	Rinse mouth. Get medical attention if sympto	oms occur.	
Most important symptoms/effects, acute and delayed	May cause redness and pain. Symptoms of c nausea and vomiting.	overexposure may be headach	ne, dizziness, tiredness
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and tre	eat symptomatically.	
General information	Ensure that medical personnel are aware of a protect themselves. If you feel unwell, seek n		
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Cart	oon dioxide (CO2).	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as th	nis will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may b	e formed.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full p	protective clothing must be wo	rn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and cor	nsider the hazards of other inv	olved materials.
General fire hazards	No unusual fire or explosion hazards noted.	Will burn if involved in a fire.	
6. Accidental release meas	ures		
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep per appropriate protective equipment and clothin NIOSH/MSHA approved respirator if there is the exposure limits. Ensure adequate ventilar spillages cannot be contained. For personal	g during clean-up. Avoid inhal a risk of exposure to dust/fum tion. Local authorities should b	ation of dust. Use a le at levels exceeding be advised if significan
Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing using a vacuum cleaner equipped with HEPA		
	Large Spills: Wet down with water and dike for container. Following product recovery, flush a		naterial into waste
	Small Spills: Sweep up or vacuum up spillage surface thoroughly to remove residual contar SDS.		
Environmental precautions	Avoid discharge into drains, water courses of	r onto the ground.	
7. Handling and storage			
Precautions for safe handling Conditions for safe storage, including any incompatibilities	Minimize dust generation and accumulation. where dust is formed. Avoid breathing dust. A appropriate personal protective equipment. C Store locked up. Store in original tightly close away from incompatible materials (see Section	Avoid contact with eyes, skin, Observe good industrial hygier ed container. Store in a well-ve	and clothing. Wear ne practices.

8. Exposure controls/personal protection

or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local sectors.		
Appropriate engineering controlsGood general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate loca exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilit and emergency shower must be available when handling this product.Individual protection measures, such as personal protective equipment Eye/face protection Hand protectionWear asfety goggles and a face shield.Skin protection upplier.Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.OtherWear appropriate chemical resistant clothing.Respiratory protection equipment.In case of inadequate ventilation or risk of inhalation of dust or fumes, use suitable respiratory equipment.Thermal hazardsWear appropriate thermal protective clothing, when necessary.General hygiene considerationsAlways observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective	Occupational exposure limits	No exposure limits noted for ingredient(s).
controlsshould be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate loca exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilit and emergency shower must be available when handling this product.Individual protection measures, such as personal protective equipment Eye/face protection Hand protection Wear safety goggles and a face shield.Kin protection upplier.Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.OtherWear appropriate chemical resistant clothing.Respiratory protection equipment.In case of inadequate ventilation or risk of inhalation of dust or fumes, use suitable respiratory equipment.Thermal hazardsWear appropriate thermal protective clothing, when necessary.General hygiene considerationsAlways observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective	Biological limit values	No biological exposure limits noted for the ingredient(s).
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9. Physical and chemical properties

Appearance		
Physical state	Solid.	
Form	White powder.	
Color	White.	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	Not available.	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or exp	osive limits	
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Soluble in water.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	

10. Stability and reactivity

Reactivity

Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Carbon monoxide. Carbon dioxide.

11. Toxicological information

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Information on likely routes of e	•
Inhalation	Dust may irritate respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause redness and pain.
Information on toxicological effe	ects
Acute toxicity	May cause discomfort if swallowed.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	1
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulate Not listed.	ed Substances (29 CFR 1910.1001-1050)
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Further information	No other specific acute or chronic health impact noted.
12. Ecological information	1
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal consideration	ns
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes chemical

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	01-December-2017
Revision date	12-July-2017
Version #	02
NFPA ratings	20
References	ACGIH IARC Monographs. Overall Evaluation of Carcinogenicity HSDB® - Hazardous Substances Data Bank
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