Safety Data Sheet

Canada

Section 1. Identification

Product name **Custom lyophilised product - Antibiotics**

Catalogue Number 28990028

Product type Solid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Use in laboratories
Analytical chemistry.
Scientific research and development

Supplier Cytiva
Amersham Place
Little Chalfont
Buckinghamshire
HP7 9NA United Kingdom
+44 1494 508000

Importer Cytiva Canada
1055 Vernon Dr
Vancouver BC V6A 3P4
Canada
+1 778-956-2584

In case of emergency

INFOTRAC
Outside of the United States, call 24 Hour number: 001-352-323-3500 (Call Collect)
In the United States, call 24 Hour number: 1-800-535-5053

Section 2. Hazard identification

Classification of the substance or mixture TOXIC TO REPRODUCTION - Category 1B

GHS label elements

Hazard pictograms

Signal word Danger

Hazard statements May damage fertility or the unborn child.

Precautionary statements

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear protective clothing: Recommended: lab coat. Wear eye or face protection. Wear hearing protection.

Response IF exposed or concerned: Get medical advice or attention.

Storage Store locked up.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 69%

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Other means of identification Not available.

Ingredient name	Synonyms	% (w/w)	CAS number
Sodium tetraborate decahydrate	borax decahydrate; Borax; Sodium tetraborate, decahydrate; Borates, tetra, sodium salts, Decahydrate; BORATES, TETRA, SODIUM SALTS DECAHYDRATE; Sodium Tetraborate Decahydrate; Sodium borate decahydrate; Borates, tetra, sodium salts (decahydrate); Borates, tetra, sodium salts: Decahydrate; disodium tetraborate decahydrate, other than natural borate of heading Nº 2528; borax; borax decahydrate; sodium tetraborate decahydrate; sodium biborate decahydrate; sodium pyroborate decahydrate; E 285	≥1 - ≤5	CAS: 1303-96-4
Boric acid	Boric acid (H3BO3); Orthoboric acid; boric acid, other than natural boric acid of heading Nº 2528; boric acid, crude natural, containing not more than 85 per cent of H3BO3 calculated on the dry weight; product consisting of ammonium nitrate, magnesium nitrate, mixture of diammonium phosphate and ammonium sulphate and boric acid; E 284; boracic acid; orthoboric acid; borofax; TRIHYDROXYBORANE; BORON TRIHYDROXIDE; Boracic acid; trioxoboric acid; Trihydroxidoboron	≥1 - ≤5	CAS: 10043-35-3
Sucrose	.alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl; α-D-Glucopyranoside, β-D-fructofuranosyl; Saccharose; Sugar; Table sugar; Saccarose; Rock candy; Granulated sugar; Confectioner's sugar; Cane sugar; Beet sugar	≥0.5 - ≤1.5	CAS: 57-50-1
Glucose	D-Glucose; Dextrose; D-gluconaldehyde; product composed of 62,1 % calcium carrageenate, 32,9 % dextrose and 5 % sucrose; DEXTROSE, ANHYDROUS; Grape sugar; GLUCOSE, D-; corn sugar; glucolin; D-GLUCOSE ANHYDROUS GRANULAR; GLUCOSE POWDER	≥0.5 - ≤1.5	CAS: 50-99-7
sodium formate	Formic acid, sodium salt (1:1); Formic acid, sodium salt; Formic acid sodium salt; Formic acid salt (K,Na,Ca,Li,Mg,Al); FORMATE, SODIUM	≥0.5 - ≤1.5	CAS: 141-53-7

There are no additional 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. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, 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/symptoms

Eye contact	No specific data.
Inhalation	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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	No specific fire or explosion hazard.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 containment and cleaning up

Small spill	Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
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: 18 to 25°C (64.4 to 77°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. Store locked up. 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

Occupational exposure limits

Ingredient name	Exposure limits
Sodium tetraborate decahydrate	**CA Saskatchewan Provincial (Canada, 4/2021) [Borate compounds, inorganic]** STEL 15 minutes: 6 mg/m³. Form: Inhalable fraction. TWA 8 hours: 2 mg/m³. Form: Inhalable fraction. **CA British Columbia Provincial (Canada, 9/2024) [borate compounds, inorganic]** TWA 8 hours: 2 mg/m³. Form: Inhalable. STEL 15 minutes: 6 mg/m³. Form: Inhalable. **CA Ontario Provincial (Canada, 6/2019) [Borate compounds, Inorganic]** TWA 8 hours: 2 mg/m³. Form: Inhalable particulate matter.. STEL 15 minutes: 6 mg/m³. Form: Inhalable particulate matter.. **CA Quebec Provincial (Canada, 2/2024) [borate, inorganic compounds]** STEV 15 minutes: 6 mg/m³. Form: inhalable aerosol fraction.

	TWAEV 8 hours: 2 mg/m³. Form: inhalable aerosol fraction. **CA Alberta Provincial (Canada, 3/2023)** OEL 8 hours: 1 mg/m³. OEL 15 minutes: 3 ppm.
Boric acid	**CA Saskatchewan Provincial (Canada, 4/2021) [Borate compounds, inorganic]** STEL 15 minutes: 6 mg/m³. Form: Inhalable fraction. TWA 8 hours: 2 mg/m³. Form: Inhalable fraction. **CA British Columbia Provincial (Canada, 9/2024) [borate compounds, inorganic]** TWA 8 hours: 2 mg/m³. Form: Inhalable. STEL 15 minutes: 6 mg/m³. Form: Inhalable. **CA Ontario Provincial (Canada, 6/2019) [Borate compounds, Inorganic]** TWA 8 hours: 2 mg/m³. Form: Inhalable particulate matter.. STEL 15 minutes: 6 mg/m³. Form: Inhalable particulate matter.. **CA Quebec Provincial (Canada, 2/2024) [borate, inorganic compounds]** STEV 15 minutes: 6 mg/m³. Form: inhalable aerosol fraction. TWAEV 8 hours: 2 mg/m³. Form: inhalable aerosol fraction.
Sucrose	**CA Saskatchewan Provincial (Canada, 4/2021)** STEL 15 minutes: 20 mg/m³. TWA 8 hours: 10 mg/m³. **CA British Columbia Provincial (Canada, 9/2024)** Notes: The 8-hour TWA listed in the Table is for the total dust. The substance also has an 8-hour TWA of 3 mg/m3 for the respirable fraction. TWA 8 hours: 10 mg/m³. Form: Total dust. TWA 8 hours: 3 mg/m³. Form: respirable fraction. **CA Ontario Provincial (Canada, 6/2019)** TWA 8 hours: 10 mg/m³. **CA Quebec Provincial (Canada, 2/2024)** TWAEV 8 hours: 10 mg/m³. **CA Alberta Provincial (Canada, 3/2023)** OEL 8 hours: 10 mg/m³.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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. Recommended: lab coat
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. Recommended: A respirator is not needed under normal and intended conditions of product use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance	
Physical state	Solid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	8
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flash point	Not applicable.
Burning time	Not available.
Burning rate	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Lower and upper explosive (flammable) limits	Not applicable.
Vapor pressure	Not available.
Relative vapor density	Not applicable.
Relative density	Not available.
Solubility in water	Not available.
Partition coefficient: n-octanol/ water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.
Flow time (ISO 2431)	Not available.
Particle characteristics	
Median particle size	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	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

Product/ingredient name	Result
Sodium tetraborate decahydrate	**Rat - Oral - LD50** 4500 mg/kg **Rabbit - Dermal - LD50** >2000 mg/kg **Rat - Oral - LD50** 2660 mg/kg **Rat - Inhalation - LC50 Vapor** >2 g/m³ [4 hours]
Boric acid	**Rat - Oral - LD50** 2660 mg/kg
Sucrose	**Rat - Oral - LD50** 29700 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Cyanosis Gastrointestinal - Hypermotility, diarrhea
Glucose	**Rat - Oral - LD50** 25800 mg/kg Toxic effects: Behavioral - Coma Lung, Thorax, or Respiration - Cyanosis Gastrointestinal - Hypermotility, diarrhea
sodium formate	**Rat - Inhalation - LC50 Dusts and mists** 670 mg/m³ [4 hours]

Conclusion/Summary [Product] Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] Not available.

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] Not available.

Respiratory

Conclusion/Summary [Product] Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product]	Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product]	Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
Sodium tetraborate decahydrate	-	-	A4
Boric acid	-	-	A4
Sucrose	-	-	A4

Reproductive toxicity

Not available.

Conclusion/Summary [Product]	Not available.

Ingredient name	Conclusion/Summary
Boric acid	Reproductive toxin

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Sodium tetraborate decahydrate	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

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.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Inhalation	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] Not available.

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 May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Custom lyophilised product - Antibiotics	21280.0	35000	N/A	43.5	19.4
Sodium tetraborate decahydrate	2660	2500	N/A	3	N/A
Boric acid	2660	N/A	N/A	N/A	N/A
Sucrose	29700	N/A	N/A	N/A	N/A
Glucose	25800	N/A	N/A	N/A	N/A
sodium formate	N/A	N/A	N/A	N/A	0.67

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Sodium tetraborate decahydrate	**Acute - LC50** Fish - *Salmo trutta* 27 mg/l [27 hours] **Acute - EC50** Daphnia 141 mg/l [48 hours]
Boric acid	**Chronic - NOEC - Fresh water** Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* 2100 µg/l [87 days] Effect: Mortality **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* Age: <24 hours 6000 µg/l [21 days] Effect: Reproduction **Acute - LC50 - Fresh water** US EPA Crustaceans - Water flea - *Ceriodaphnia dubia* Age: <24 hours 45.5 mg/l [48 hours] Effect: Mortality **Acute - LC50 - Marine water** OECD Fish - Red sea bream - *Pagrus major* Weight: 0.6 g 75 mg/l [96 hours] Effect: Mortality
sodium formate	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* 2300 mg/l [96 hours] Effect: Mortality **Acute - LC50 - Fresh water** Crustaceans - Water flea - *Ceriodaphnia dubia*

1400 mg/l [48 hours]
Effect: Mortality

Conclusion/Summary [Product] Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Glucose	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Boric acid	-1.09	-	Low
Sucrose	-3.7	-	Low
Glucose	-3.24	-	Low
sodium formate	-2.3	-	Low

Mobility in soil

Soil/Water partition coefficient Not available.

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments	Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI	None of the components are listed.
CEPA Toxic substances	None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Canada	Not determined.
United States	Not determined.

Section 16. Other information

History

Date of printing	2/16/2026
Date of issue/Date of revision	2/16/2026
Date of previous issue	4/29/2024
Version	2.02
	sds_author@cytiva.com
Key to abbreviations	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals HPR = Hazardous Products Regulations 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

Procedure used to derive the classification

Classification	Justification
TOXIC TO REPRODUCTION - Category 1B	Calculation method

References Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.