

Safety Data Sheet

Canada

Section 1. Identification

Product name PlusOne SDS, 100 g

Catalogue Number 17131301



Chemical name Sodium Dodecyl Sulphate

Synonym Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; Sulfuric acid, monododecyl ester, sodium salt; Dodecyl hydrogen sulfate; Sodium dodecyl sulfate; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate; ethylcellulose, in the form of an aqueous dispersion containing hexadecan-1-ol (CAS RN 36653-82-4) and sodium dodecyl sulphate (CAS RN 151-21-3), containing by weight 27 (± 3) % of ethylcellulose; SODIUM MONODODECYL SULFATE; SODIUM LAURYL SULFATE, DENTAL GRADE; SODIUM LAURYL SULFATE 30%

Product type Powder.

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

Identified uses

Analytical chemistry.
Laboratory chemicals
Scientific research and development

Consumer use

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Supplier Cytiva
Amersham Place
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Buckinghamshire
HP7 9NA United Kingdom
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Importer Cytiva Canada
1055 Vernon Dr
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Canada
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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 ACUTE TOXICITY (oral) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms



Signal word

Warning



Hazard statements	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response	Collect spillage. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it 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 or attention.
Storage	Not applicable.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture	Substance
Chemical name	Sodium Dodecyl Sulphate
Other means of identification	Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; Sulfuric acid, monododecyl ester, sodium salt; Dodecyl hydrogen sulfate; Sodium dodecyl sulfate; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate; ethylcellulose, in the form of an aqueous dispersion containing hexadecan-1-ol (CAS RN 36653-82-4) and sodium dodecyl sulphate (CAS RN 151-21-3), containing by weight 27 (± 3) % of ethylcellulose; SODIUM MONODODECYL SULFATE; SODIUM LAURYL SULFATE, DENTAL GRADE; SODIUM LAURYL SULFATE 30%

Ingredient name	Synonyms	% (w/w)	CAS number
Sodium Dodecyl Sulphate	Sulfuric acid monododecyl ester sodium salt (1:1); Sulfuric acid monododecyl ester sodium salt; Sulfuric acid, monododecyl ester, sodium salt; Dodecyl hydrogen sulfate; Sodium dodecyl sulfate; SODIUM LAURYL SULFATE; Dodecyl sodium sulphate; ethylcellulose, in the form of an aqueous dispersion containing hexadecan-1-ol (CAS RN 36653-82-4) and sodium dodecyl sulphate (CAS RN 151-21-3), containing by weight 27 (± 3) % of ethylcellulose; SODIUM MONODODECYL SULFATE; SODIUM LAURYL SULFATE, DENTAL GRADE; SODIUM LAURYL SULFATE 30%	100	CAS: 151-21-3

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.
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 adverse health effects persist or are severe. 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. 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. If necessary, call a poison center or physician. 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	Causes serious eye irritation.
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact	Causes skin irritation.
Ingestion	Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	No specific data.

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures**Extinguishing media**

Suitable extinguishing media	Use dry chemical powder.
Unsuitable extinguishing media	None known.

Specific hazards arising from the chemical May form explosible dust-air mixture if dispersed. This material is very toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing dust. 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
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Methods and materials for containment and cleaning up

Small spill	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Avoid creating dusty conditions and prevent wind dispersal. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid release to the environment. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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: 10 to 30°C (50 to 86°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	Use only with adequate ventilation. 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
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.
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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: chemical splash goggles. If operating conditions cause high dust concentrations to be produced, use dust goggles.
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.
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.

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. [Flakes. Powder.]
Color	White to yellowish.
Odor	Faint odor. [Slight]
Odor threshold	Not available.
pH	6.5 to 8.5 [Conc. (% w/w): 1%]
Melting point/freezing point	204 to 207°C (399.2 to 404.6°F)
Boiling point or initial boiling point and boiling range	Not available.
Flash point	Open cup: >150°C (>302°F)
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(ies)

Media	Result
cold water	Partially soluble
hot water	Partially soluble
methanol	Partially soluble
diethyl ether	Not soluble
acetone	Very slightly soluble

Solubility in water	>130 g/l [OECD 105]
Partition coefficient: n-octanol/ water	-2.03
Auto-ignition temperature	310.5°C (590.9°F) [VDI 2263]
Decomposition temperature	380°C (716°F)
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.
Molecular weight	288.42 g/mole

Particle characteristics

Median particle size	Not available.
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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	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials
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

Sodium Dodecyl Sulphate

Result

Rat - Oral - LD50
1288 mg/kg

Conclusion/Summary [Product]

Not available.

Skin corrosion/irritation

Product/ingredient name

Sodium Dodecyl Sulphate

Result

Human - Skin - Mild irritant

Duration of treatment/exposure: 48 hours
Amount/concentration applied: 5 %

Human - Skin - Severe irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 10 %

Guinea pig - Skin - Mild irritant

Duration of treatment/exposure: 336 hours
Amount/concentration applied: 25250 ppm

Guinea pig - Skin - Mild irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 25250 ppm

Guinea pig - Skin - Severe irritant

Duration of treatment/exposure: 48 hours
Amount/concentration applied: 25250 ppm

Guinea pig - Skin - Severe irritant

Duration of treatment/exposure: 72 hours
Amount/concentration applied: 25250 ppm

Human - Skin - Mild irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 0.5 %

Human - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 10 pph

Man - Skin - Mild irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %

Mouse - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 5 %

Rabbit - Skin - Severe irritant

Duration of treatment/exposure: 24 hours
Amount/concentration applied: 2.5 %

Mouse - Skin - Severe irritant

Duration of treatment/exposure: 4 hours
Amount/concentration applied: 1 pph

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 1 hours



Amount/concentration applied: 5 %

Conclusion/Summary
[Product] Not available.

Serious eye damage/eye irritation

Product/ingredient name
Sodium Dodecyl Sulphate

Result

Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 5 pph

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 1 %

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 1 %

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.

Reproductive toxicity

Not available.

Conclusion/Summary
[Product] Not available.

Specific target organ toxicity (single exposure)

Not available.



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 Causes serious eye irritation.

Inhalation Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact Causes skin irritation.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact Adverse symptoms may include the following:
irritation
redness

Ingestion No specific data.

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 Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

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**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Sodium Dodecyl Sulphate	1288	N/A	N/A	N/A	N/A



Section 12. Ecological information

Toxicity

Product/ingredient name
Sodium Dodecyl Sulphate

Result

Acute - LC50 - Fresh water

Fish - Carp, hawk fish - *Cirrhinus mrigala* - Larvae

Age: 2 days; Size: 4.5 mm; Weight: 51 mg

590 µg/l [96 hours]

Effect: Mortality

Acute - EC50 - Marine water

Algae - Diatom - *Skeletonema costatum*

1200 µg/l [96 hours]

Effect: Population

Acute - LC50 - Marine water

Crustaceans - Brine shrimp - *Artemia salina* - Adult

Age: 25 days; Size: 3.5 to 4.5 mm

900 µg/l [48 hours]

Effect: Mortality

Chronic - NOEC - Marine water

Algae - Sea Lettuce - *Ulva fasciata* - Zoea

1.25 mg/l [96 hours]

Effect: Reproduction

Chronic - NOEC - Fresh water

OECD

Crustaceans - Water flea - *Pseudosida ramosa* - Neonate

Age: <24 hours

1 mg/l [21 days]

Effect: Reproduction

Chronic - NOEC - Fresh water

OECD

Fish - Eastern mosquitofish - *Gambusia holbrooki*

Weight: 0.14 g

0.8 mg/l [28 days]

Effect: Enzymes

Conclusion/Summary
[Product] Not available.

Persistence and degradability

Not available.

Conclusion/Summary
[Product] Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Sodium Dodecyl Sulphate	-	>60%; 28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	LogP_{ow}	BCF	Potential
Sodium Dodecyl Sulphate	-2.03	-	Low

Mobility in soil

Soil/Water partition coefficient 1234.14 Koc

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	UN1325	UN1325	UN1325	UN1325	UN1325
UN proper shipping name	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)	Flammable solid, organic, n.o.s. (Sodium Dodecyl Sulphate)
Transport hazard class(es)	4.1	4.1	4.1	4.1	4.1
					
					
Packing group	III	III	III	III	III
Environmental hazards	Yes.	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	Product classified as - per the following sections of the Transportation of Dangerous Goods Regulations: 2.20-2.22 (Class 4), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.		The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.
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 This material is not listed.

CEPA Toxic substances This material is not listed.

International regulationsChemical 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	This material is listed or exempted.
United States	This material is active or exempted.

Section 16. Other information**History**

Date of printing	1/30/2026
Date of issue/Date of revision	1/30/2026
Date of previous issue	3/3/2023
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
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
ACUTE TOXICITY (oral) - Category 4	On basis of test data
SKIN IRRITATION - Category 2	On basis of test data
EYE IRRITATION - Category 2A	On basis of test data
AQUATIC HAZARD (ACUTE) - Category 1	On basis of test data
AQUATIC HAZARD (LONG-TERM) - Category 3	On basis of test data

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.

