

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Biosolve™ Plus

Version 3.0 Revision Date: 07/18/2025 SDS Number: 203000013996 Date of last issue: 05/10/2024
Country / Language: CA / EN

SECTION 1. IDENTIFICATION

Product name : Biosolve™ Plus
Product code : 000000000062012436
Other means of identification : No data available

Manufacturer or supplier's details

Company : LANXESS Canada Co.
Product Safety and Regulatory Affairs
25 Erb Street
Elmira, Canada N3B 2J3

Responsible Department : +1800LANXESS

Emergency telephone : In an emergency, CANUTEC may be called collect at:
613.996.6666 (24 hrs)
*666 cellular (Canada only)
Lanxess Emergency Phone (866) 673 6350.

Recommended use of the chemical and restrictions on use

Recommended use : Cleaning agent

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

||| Skin corrosion : Category 1
||| Serious eye damage : Category 1
||| Skin sensitization : Category 1
||| Specific target organ toxicity - single exposure (Inhalation) : Category 1 (Respiratory Tract)
||| Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Respiratory Tract)

GHS label elements

||| Hazard pictograms : 

||| Signal Word : Danger

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Hazard Statements	: H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H370 Causes damage to organs (Respiratory Tract) if inhaled. H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.
Precautionary Statements	: Prevention: P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	: Mixture
Chemical nature	: Solution of sodium hydroxide in water. and Sodium salts

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Components

Chemical name	CAS-No.	Concentration (% w/w)
sodium hydroxide	1310-73-2	>= 5 - < 10
tetrасodium ethylenediaminetetraacetate	64-02-8	>= 1 - < 5
Alcohols, C9-11-iso-, C10-rich, ethoxylated	78330-20-8	>= 1 - < 5
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	61789-40-0	>= 1 - < 5
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	>= 1 - < 5
D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	110615-47-9	>= 1 - < 5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice : No action shall be taken involving any personal risk or without suitable training.

If inhaled : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious, place in recovery position and get medical attention immediately. Maintain open airway. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

In case of skin contact : Get medical attention immediately. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Continue to rinse for 30 minutes. Chemical burns must be treated promptly by a physician. Wash contaminated clothing before reuse.

In case of eye contact : Get medical attention immediately. In case of contact, flush eyes with plenty of water for at least 30 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Remove contact lenses, if present and easy to do. Continue rinsing. Chemical burns must be treated promptly by a physician.

If swallowed : Rinse mouth with water. Do not induce vomiting unless directed to do by medical personnel. Get medical attention if symptoms occur.

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Most important symptoms and effects, both acute and delayed

Symptoms

- : Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.
- Skin: Reddening, burning, and possible permanent damage.
- Skin: Causes irritation with symptoms of reddening, itching, and swelling.
- Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Inhalation: Causes respiratory tract burns.
- Burns to the respiratory tract can cause swelling that could require a tracheotomy. Pulmonary edema may be delayed for several hours up to several days. Many hydrofluoric acid fatalities have been due to severe pulmonary edema. Toxic effects can also include depletion of calcium in the body, which can result in death if not treated.

Effects

- : May cause an allergic skin reaction.
- Causes serious eye damage.
- Causes damage to organs if inhaled.
- May cause damage to organs through prolonged or repeated exposure if inhaled.
- Causes severe burns.

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.

Notes to physician

- : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media

- : None known.

Specific hazards during fire fighting

- : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

- : Metal oxides
- Carbon dioxide (CO₂)
- Carbon monoxide
- Nitrogen oxides (NO_x)
- Halogenated compounds

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Further information	: 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. If potential for exposure exists refer to Section 8 for specific personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protection equipment. Do not touch or walk through spilled material. Evacuate unnecessary personnel. Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation. Do not breathe vapors, aerosols.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Stop leak if safe to do so. Move containers from spill area. Wash spillages into an effluent treatment plant or proceed as follows. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Dispose of wastes in an approved waste disposal facility. Do not allow into the sewerage system, surface waters or groundwater or into the soil. Contaminated absorbent material may pose the same hazard as the spilled product.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Avoid inhalation, ingestion and contact with skin and eyes.
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Use only with adequate ventilation.
Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.

Conditions for safe storage : 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 containers 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 container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.
Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
sodium hydroxide	1310-73-2	C	2 mg/m ³	CA QC OEL
		C	2 mg/m ³	ACGIH

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protective equipment

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

Hand protection

Material : Permeation resistant gloves.

Remarks : Impervious gloves

Eye protection : Tightly fitting safety goggles

Skin and body protection : Wear suitable protective clothing.
Chemical resistant apron

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Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid, viscous

Physical state : liquid

Color : blue

Odor : strong, aliphatic

Odor Threshold : No data available

pH : 13 - 14

Melting point/ range : 0 °C

Boiling point/boiling range : 100 °C (1,013 hPa)

Flash point : > 93 °C
Method: Pensky-Martens., closed cup

Evaporation rate : No data available

Flammability (liquids) : No data available

Self-ignition : No data available

Burning number : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

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Vapor pressure : 21.33 hPa (25 °C)
Relative vapor density : No data available
Relative density : 1.13
Density : 1.12 - 1.14 g/cm³ (20 °C)
Solubility(ies)
Water solubility : No data available
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Ignition temperature : No data available
Decomposition temperature : No data available
Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Metal corrosion rate : Not corrosive to metals.
Particle size : No data 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 chemically stable.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
Conditions to avoid : No specific data.
Incompatible materials : Incompatible with acids and bases.
Hazardous decomposition products : No decomposition if stored and applied as directed.

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact
Ingestion

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

tetrasodium ethylenediaminetetraacetate:

Acute oral toxicity : LD50 (Rat, male and female): 1,780 mg/kg
Method: OECD Test Guideline 401
GLP: No

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 412
GLP: Yes

Alcohols, C9-11-iso-, C10-rich, ethoxylated:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Acute oral toxicity : LD50 (Rat, male and female): 1,500 mg/kg
Method: OECD Test Guideline 401
Remarks: Active ingredient

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Test substance: Aqueous solution
Assessment: The substance or mixture has no acute dermal

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toxicity

Remarks: Dosage caused no mortality

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: Yes
Remarks: Dosage caused no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: Yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality

Skin corrosion/irritation

Causes severe burns.

Product:

Result : Corrosive after 4 hours or less of exposure

Components:

sodium hydroxide:

Species : Rabbit
Method : OECD Test Guideline 435
Result : Causes severe burns.
GLP : No

tetrasodium ethylenediaminetetraacetate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Species : Humans
Result : Irritating to skin.
Test substance : Aqueous solution

Species : Rabbit
Result : Irritating to skin.
Test substance : Aqueous solution

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

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GLP : Yes

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Irritating to skin.
GLP : Yes

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result : Corrosive

Components:

sodium hydroxide:

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : OECD Test Guideline 405

tetrasodium ethylenediaminetetraacetate:

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : OECD Test Guideline 405

Alcohols, C9-11-iso-, C10-rich, ethoxylated:

Result : Risk of serious damage to eyes.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : Draize Test
Test substance : Aqueous solution

D-Glucopyranose, oligomeric, decyl octyl glycosides:

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : OECD Test Guideline 405
GLP : Yes

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : OECD Test Guideline 405
GLP : Yes

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Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Components:

sodium hydroxide:

Species : Human
Assessment : Does not cause skin sensitization.
GLP : No

tetrasodium ethylenediaminetetraacetate:

Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitization on laboratory animals.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Test Type : Patch Test
Routes of exposure : Skin contact
Species : Humans
Result : May cause sensitization by skin contact.
Test substance : Aqueous solution

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.
GLP : Yes

Germ cell mutagenicity

Not classified due to lack of data.

Components:

sodium hydroxide:

Genotoxicity in vitro : Test Type: Ames test
Test system: *Salmonella typhimurium*
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Application Route: Intraperitoneal

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Method: OECD Test Guideline 474
Result: negative

tetrasodium ethylenediaminetetraacetate:

Genotoxicity in vitro : Test Type: Ames test
Test system: Bacteria
Metabolic activation: with and without metabolic activation
Result: negative

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Genotoxicity in vitro : Test Type: Mutagenicity (Escherichia coli - reverse mutation assay)
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test Type: Chromosome aberration test in vitro
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: Yes

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: Yes
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male)
Cell type: Bone marrow
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative
GLP: Yes

Carcinogenicity

Not classified due to lack of data.

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Reproductive toxicity

Not classified due to lack of data.

Components:

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Effects on fetal development : Test Type: Pre-natal
Species: Rat, female
Application Route: Oral
Duration of Single Treatment: 15 d
General Toxicity Maternal: NOAEL: 95 mg/kg bw/day
Developmental Toxicity: NOAEL: 286 mg/kg bw/day
Method: OECD Test Guideline 414
Remarks: The results refer to active ingredient.

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Oral
General Toxicity Parent: NOAEL: 1,000 mg/kg bw/day
Fertility: NOAEL: 1,000 mg/kg bw/day
Method: OECD Test Guideline 421
Result: No adverse effects.

Effects on fetal development : Test Type: Pre-natal
Species: Rat, female
Application Route: Oral
Duration of Single Treatment: 20 d
General Toxicity Maternal: NOAEL: 1,000 mg/kg bw/day
Developmental Toxicity: NOAEL: 1,000 mg/kg bw/day
Method: OECD Test Guideline 414
Result: No adverse effects.
GLP: Yes

STOT-single exposure

Causes damage to organs (Respiratory Tract) if inhaled.

Product:

Routes of exposure : Inhalation
Target Organs : Respiratory Tract
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT-repeated exposure

May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Components:

tetrasodium ethylenediaminetetraacetate:

Routes of exposure : Inhalation

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Target Organs Assessment : Respiratory Tract
: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Species : Rat, male and female
NOAEL : 500 mg/kg
Application Route : Oral
Number of exposures : daily
Method : OECD Test Guideline 407

Species : Rat, male and female
NOAEL : 250 mg/kg
Application Route : Oral
Number of exposures : daily
Method : OECD Test Guideline 408

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Species : Rat, male and female
NOAEL : 1,000 mg/kg
Application Route : Oral
Exposure time : 90 d
Number of exposures : daily
Method : Regulation (EC) No. 440/2008, Annex, B.26
GLP : Yes
Remarks : Subacute toxicity

Aspiration toxicity

Not classified due to lack of data.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

sodium hydroxide:

Toxicity to fish : LC50 (Trout): 45.4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

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Chronic aquatic toxicity : This product has no known ecotoxicological effects.

tetrasodium ethylenediaminetetraacetate:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 121 mg/l
Exposure time: 96 h
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 610 mg/l
Exposure time: 24 h
Method: ISO 6341
Remarks: Fresh water

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Remarks: Fresh water
NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l
Exposure time: 72 h
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): > 25.7 mg/l
Exposure time: 35 d
Method: OECD Test Guideline 210
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 25 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Fresh water

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 2 mg/l
Exposure time: 96 h
Remarks: Active ingredient

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6.4 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
EC50 (Daphnia magna (Water flea)): 1.9 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): 9.86 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: Yes

NOEC (Scenedesmus subspicatus): 3.86 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

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GLP: Yes

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.16 mg/l
Exposure time: 28 d
Method: OECD Test Guideline 204
Remarks: The results refer to active ingredient.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.9 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 202

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 2.95 mg/l
Exposure time: 96 h
GLP: Yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 7 mg/l
Exposure time: 48 h
GLP: Yes

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 12.5 mg/l
Exposure time: 72 h
GLP: Yes

EC10 (Desmodesmus subspicatus (green algae)): 4.15 mg/l
Exposure time: 72 h
GLP: Yes

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): 1.8 mg/l
Exposure time: 28 Days
Method: OECD Test Guideline 204
GLP: Yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): 1.76 mg/l
Exposure time: 21 Days
Method: OECD Test Guideline 202
GLP: Yes

Toxicity to microorganisms : EC0: 5,000 mg/l
Exposure time: 16 h
Method: DIN 38 412 Part 8
GLP: Yes

Persistence and degradability

Components:

sodium hydroxide:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

tetrasodium ethylenediaminetetraacetate:

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Biodegradability : Result: Not readily biodegradable.
Biodegradation: 10 %
Exposure time: 28 d
Method: OECD Test Guideline 302B

Alcohols, C9-11-iso-, C10-rich, ethoxylated:

Biodegradability : Result: Readily biodegradable.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301B

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301D
GLP: Yes

Bioaccumulative potential

Components:

tetrasodium ethylenediaminetetraacetate:

Bioaccumulation : Bioconcentration factor (BCF): 1.8

Partition coefficient: n-octanol/water : log Pow: -13.17 (25 °C)

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts:

Partition coefficient: n-octanol/water : log Pow: -1.28
Method: Calculated value

D-Glucopyranose, oligomeric, C10-16-alkyl glycosides:

Partition coefficient: n-octanol/water : log Pow: <= -0.07 (20 °C)
Method: Calculated value

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The generation of waste should be avoided or minimized wherever possible.

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This material and its container must be disposed of in a safe way.

Empty containers retain product residue; observe all precautions for product.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1824
Proper shipping name : Sodium hydroxide solution
Class : 8
Packing group : II
Labels : 8



Packing instruction (cargo aircraft) : 855: 30.00 L

Packing instruction (passenger aircraft) : 851: 1.00 L

IMDG-Code

UN number : UN 1824
UN proper shipping name : SODIUM HYDROXIDE SOLUTION

Class : 8
Packing group : II
Labels : 8



EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

TDG

UN number : UN 1824
Proper shipping name : SODIUM HYDROXIDE SOLUTION

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Class	:	8
Packing group	:	II
Labels	:	8
	:	



ERG Code : 154

Marine pollutant : no

Product classified per Transportation of Dangerous Goods Regulations sections 2.40-2.42 (Class 8).

Hazard and Handling Notes

Corrosive.

Keep away from foodstuffs, acids and alkalis

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

TSCA : All substances listed as active on the TSCA inventory

DSL : All components of this product are on the Canadian DSL

Canadian lists

No substances are subject to a Significant New Activity Notification.

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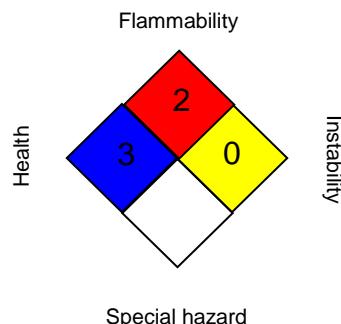
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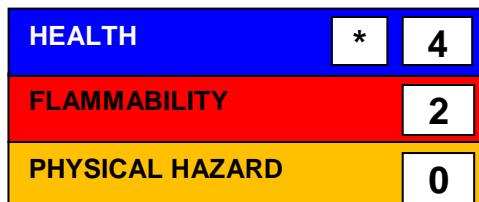
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Further information

NFPA:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

LANXESS' method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / C	:	Ceiling limit
CA QC OEL / C	:	Ceiling

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships;

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MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.

CA / EN