SAFETY DATA SHEET
according to the Hazardous Products Regulations

LANXESS
Energizing Chemistry

Biosolve™ AFC

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3.0	07/17/2025	203000013998	Country / Language: CA / EN

SECTION 1. IDENTIFICATION

Product name : Biosolve™ AFC

Product code : 000000000062012492

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)

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 1A

Serious eye damage : Category 1

Skin sensitization : Category 1

Specific target organ toxicity - single exposure (Inhalation) : Category 1 (Respiratory Tract)

GHS label elements

Hazard pictograms :

Signal Word : Danger

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.

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 : Cleaning agent
Water-based.
of
Acids

Components

Chemical name	CAS-No.	Concentration (% w/w)
sulphamidic acid	5329-14-6	>= 5 - < 10
orthophosphoric acid	7664-38-2	>= 5 - < 10
Alcohols, C9-11-iso-, C10-	78330-20-8	>= 1 - < 5

rich, ethoxylated		
Glycolic Acid	79-14-1	>= 1 - < 5
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	61789-40-0	>= 1 - < 5

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

SECTION 4. FIRST AID MEASURES

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.

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 fa-

talities 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.
Causes severe burns.

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 or dry chemical.

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 : Nitrogen oxides (NOx)
Sulfur oxides
Oxides of phosphorus
Carbon dioxide (CO2)
Carbon monoxide
Halogenated compounds
Metal oxides

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 : Wear self-contained breathing apparatus for firefighting if necessary.

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.
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 accordance with local regulations.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Keep 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.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
orthophosphoric acid	7664-38-2	TWA	1 mg/m3	ACGIH
		STEL	3 mg/m3	ACGIH
		TWA	1 mg/m3	OSHA Z-1

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.

In the case of vapor formation use a respirator with an approved filter.

Filter type : Recommended Filter type:

Combined inorganic and acidic gas/vapor, ammonia/amines and organic vapor type

Hand protection

Material : Polychloroprene - CR
Wearing time : < 60 min

Material : Butyl rubber - IIR
Wearing time : < 60 min

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Material : Nitrile rubber - NBR
Wearing time : < 60 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations

Eye protection	:	Chemical resistant goggles must be worn. If inhalation hazards exist, a full-face respirator may be required instead.
Skin and body protection	:	Wear suitable protective clothing. Chemical resistant apron 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

Physical state	:	liquid
Color	:	yellow
Odor	:	slight
Odor Threshold	:	No data available
pH	:	0.5 - 1.5 Concentration: 1 %
Melting point/ range	:	0 °C
Boiling point/boiling range	:	96 °C (1,013 hPa)
Flash point	:	Not applicable
Evaporation rate	:	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

Vapor pressure	:	33.33 hPa (25 °C)
Relative density	:	1.05
Density	:	0.99 - 1.11 g/cm3 (20 °C)
Bulk density	:	1.05 kg/m3
Solubility(ies)		
Water solubility	:	Soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	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	:	alkalis Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact
Eye contact
Inhalation
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:

sulphamidic acid:

Acute oral toxicity	:	LD50 (Rat, female): 2,140 mg/kg Method: OECD Test Guideline 401 GLP: Yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: Yes Assessment: The substance or mixture has no acute dermal toxicity

orthophosphoric acid:

Acute oral toxicity	:	Symptoms: corrosive effects Assessment: The component/mixture is moderately toxic after single ingestion.

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

Glycolic Acid:

Acute oral toxicity	:	LD50 (Rat, male and female): 2,040 mg/kg Method: OPP 81-1 Acute Oral Toxicity GLP: Yes

Acute inhalation toxicity : LC50 (Rat, male): 3.6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: Yes

LC50 (Rat, female): > 5.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: Yes

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 toxicity
Remarks: Dosage caused no mortality

Skin corrosion/irritation

Causes severe burns.

Product:

Result : Corrosive

Components:

sulphamidic acid:

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

orthophosphoric acid:

Species : Rabbit
Result : Causes burns.

Glycolic Acid:

Species : Rabbit
Method : equivalent or similar to OECD Guideline 404
Result : Corrosive after 3 minutes to 1 hour of exposure
GLP : Yes

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

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result	:	Corrosive

Components:

sulphamidic acid:

Species	:	Rabbit
Result	:	Irritating to eyes.
Method	:	OECD Test Guideline 405

orthophosphoric acid:

Assessment	:	Risk of serious damage to eyes.

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

Result	:	Risk of serious damage to eyes.

Glycolic Acid:

Species	:	Rabbit
Result	:	Irreversible effects on the eye
Method	:	equivalent or similar to OECD Guideline 405
GLP	:	No

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

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified due to lack of data.

Components:

sulphamidic acid:

Result : Did not cause sensitization on laboratory animals.

Glycolic Acid:

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

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

Germ cell mutagenicity

Not classified due to lack of data.

Components:

sulphamidic acid:

Genotoxicity in vitro : Test system: Mammalian-Human
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: Yes

Test system: Mammalian-Animal
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

orthophosphoric acid:

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
GLP: Yes

Test Type: Ames test
Test system: Escherichia coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test Type: Chromosome aberration test in vitro
Test system: Human lymphocytes
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

Glycolic Acid:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium, Escherichia coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
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: without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: Yes

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with metabolic activation
Method: OECD Test Guideline 476
Result: positive
GLP: Yes

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow

Application Route: Oral
Method: OECD Test Guideline 474
Result: negative
GLP: Yes

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

Carcinogenicity

Not classified due to lack of data.

Components:

Glycolic Acid:

Result : negative

Reproductive toxicity

Not classified due to lack of data.

Components:

orthophosphoric acid:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Oral
Dose: 125 - 250 - 500 milligram per kilogram
General Toxicity Parent: NOAEL: 250 mg/kg bw/day
Fertility: NOAEL: 500 mg/kg bw/day
Early Embryonic Development: NOAEL: 500 mg/kg bw/day
Method: OECD Test Guideline 422
GLP: Yes

Glycolic Acid:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Oral
Dose: 0 - 150 - 300 - 600 mg/kg bw/day
Fertility: NOAEL: 600 mg/kg bw/day
Early Embryonic Development: NOAEL: 600 mg/kg bw/day
Method: OECD Test Guideline 415
Result: No effects on fertility and early embryonic development were detected.
GLP: Yes

Effects on fetal development : Test Type: Pre-natal
Species: Rat, female

Application Route: Oral
Dose: 0 - 75 - 150 - 300 - 600 mg/kg bw/day
General Toxicity Maternal: LOAEL: 300 mg/kg bw/day
Developmental Toxicity: LOAEL: 300 mg/kg bw/day
Method: OECD Test Guideline 414
Result: Embryotoxic effects and adverse effects on the off-spring were detected only at high maternally toxic doses
GLP: Yes

Test Type: Pre-natal
Species: Rabbit, female
Application Route: Oral
Dose: 0- 100 - 500 - 1000 - 2000 mg/kg bw/day
General Toxicity Maternal: NOAEL: 1,000 mg/kg bw/day
Developmental Toxicity: NOAEL: 2,000 mg/kg bw/day
Method: OECD Test Guideline 414
Result: Did not show teratogenic effects in animal experiments.
GLP: No information available.
Remarks: Test results on an analogous substance/product.

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.

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

Not classified due to lack of data.

Repeated dose toxicity

Components:

orthophosphoric acid:

Species	:	Rat, male and female
NOAEL	:	250 mg/kg
Application Route	:	Oral

Number of exposures	:	daily
Dose	:	125 - 250 - 500 mg/kg bw/d
Method	:	OECD Test Guideline 422
GLP	:	Yes

Glycolic Acid:

Species	:	Rat, male
NOAEL	:	150 mg/kg
LOAEL	:	300 mg/kg
Application Route	:	Oral
Exposure time	:	90 Days
Dose	:	0 - 150 - 300 - 600 mg/kg bw/day
Method	:	OECD Test Guideline 408
GLP	:	Yes
Remarks	:	Subchronic toxicity

Species	:	Rat, female
NOAEL	:	600 mg/kg
Application Route	:	Oral
Exposure time	:	90 Days
Dose	:	0 - 150 - 300 - 600 mg/kg bw/day
Method	:	OECD Test Guideline 408
GLP	:	Yes
Remarks	:	Subchronic toxicity

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

Aspiration toxicity

Not classified due to lack of data.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

sulphamidic acid:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 70.3 mg/l Exposure time: 96 h

Method: OECD Test Guideline 203
GLP: No
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 71.6 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 48 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water

NOEC (Desmodesmus subspicatus (green algae)): 18 mg/l
End point: Growth rate
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): >= 60 mg/l
Exposure time: 34 d
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 19 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: > 200 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water

orthophosphoric acid:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: nominal concentration

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: Yes
Method: OECD Test Guideline 201

GLP: Yes
Remarks: nominal concentration

NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l
End point: Growth rate
Exposure time: 72 h
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: nominal concentration

Glycolic Acid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 203
GLP: Yes
Remarks: Fresh water
nominal concentration

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: semi-static test
Analytical monitoring: Yes
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water
nominal concentration

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

EC10 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

NOEC (Raphidocelis subcapitata (freshwater green alga)): >= 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

ErC50 (Anabaena flos-aquae (cyanobacterium)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

EC10 (Anabaena flos-aquae (cyanobacterium)): > 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

NOEC (Anabaena flos-aquae (cyanobacterium)): >= 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: Yes
Method: OECD Test Guideline 201
GLP: Yes
Remarks: Fresh water
nominal concentration

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): >= 89.6 mg/l
End point: Reproduction
Exposure time: 21 d
Test Type: semi-static test
Analytical monitoring: Yes
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water

EC10 (Daphnia magna (Water flea)): > 89.6 mg/l
End point: Reproduction
Exposure time: 21 d
Test Type: semi-static test

Analytical monitoring: Yes
Method: OECD Test Guideline 211
GLP: Yes
Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): 320.6 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

EC20 (activated sludge): 283.3 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

NOEC (activated sludge): 100 mg/l
End point: Respiration inhibition
Exposure time: 3 h
Test Type: static test
Analytical monitoring: No
Method: OECD Test Guideline 209
GLP: Yes
Remarks: Fresh water
nominal concentration

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
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

Persistence and degradability

Components:

sulphamidic acid:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

orthophosphoric acid:

Biodegradability : Result: The methods for determining the biological degradability are not applicable to inorganic substances.

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

Biodegradability : Result: Readily biodegradable.

Glycolic Acid:

Biodegradability : aerobic
Inoculum: activated sludge, non-adapted
Result: rapidly biodegradable
Biodegradation: 83.9 %
Exposure time: 28 d
Method: OECD Test Guideline 310
GLP: Yes

Stability in water : Degradation half life (half-life): > 1 yr (25 °C) pH: 7
Method: OECD Test Guideline 111
GLP: Yes

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

Bioaccumulative potential

Components:

sulphamidic acid:

Partition coefficient: n-octanol/water : log Pow: -4.34

Glycolic Acid:

Bioaccumulation : Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Partition coefficient: n-octanol/water : log Pow: -1.2 (20 °C)
pH: 7
Method: OECD Test Guideline 107

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

Mobility in soil

Components:

Glycolic Acid:

Distribution among environmental compartments : log Koc: < 1.4
pH: 4
Method: OECD Test Guideline 121

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.
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 3264
Proper shipping name	:	Corrosive liquid, acidic, inorganic, n.o.s. (SULFAMIC ACID, PHOSPHORIC ACID)
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 3264
UN proper shipping name	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULFAMIC ACID, PHOSPHORIC ACID)
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 3264
Proper shipping name	:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULFAMIC ACID, PHOSPHORIC ACID)
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

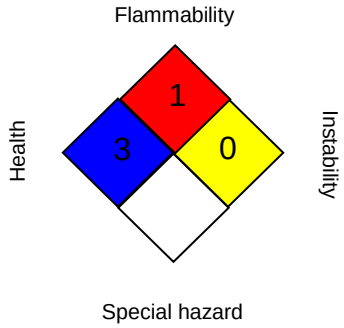
TSCA : All substances listed as active on the TSCA inventory

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

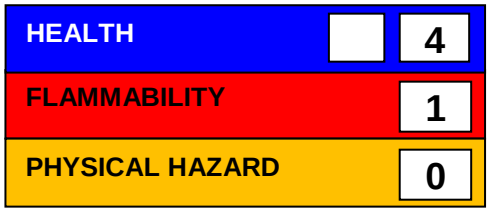
Canadian lists
No substances are subject to a Significant New Activity Notification.

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)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
OSHA Z-1 / TWA	:	8-hour time weighted average

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; 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

Revision Date	:	07/17/2025
Date format	:	mm/dd/yyyy

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.

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