



Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 08.08.2019

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Salt Assault HPC

SECTION 1: Identification

Product identifier

Product name: Salt Assault HPC

Product code: CPS-104

Recommended use of the product and restriction on use

Relevant identified uses: Presoak, Automatic Car Wash

Uses advised against: NA

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

JBS Industries

2726 Henkle Drive

Lebanon, Ohio 45036

513-228-2800

SBAETEN@JBSINDUSTRIES.COM

Emergency telephone number:

North America

CHEMTREC

800-424-9300 (24 hours)

SECTION 2: Hazard identification

GHS classification:

Skin corrosion, category 1A

Serious eye damage, category 1

Label elements

Hazard pictograms:



Signal Word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray

P264 Wash contaminated area thoroughly after handling.

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P280 Wear protective gloves/protective clothing/eye protection/face protection

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 [or shower]

P363 Wash contaminated clothing before reuse

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

P310 Immediately call a POISON CENTER/doctor if difficulty in breathing occurs.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P405 Store locked up

P501 It is the responsibility of the waste generator to characterize all waste materials according to regulatory entities.

Hazards not otherwise classified:

None

Reactivity with Water

In contact with water, releases gases which are if inhaled.

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 9004-82-4	2-dodecoxyethyl hydrogen sulfate	1-36.6
CAS number: 5329-14-6	Sulphamidic acid	1-30
CAS number: Proprietary	Cationic/Nonionic Surfactant Blend	1-25
CAS number: 1300-72-7	Sodium Xylenesulfonate	1-11
CAS number: 61789-40-0	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	0.29-10
CAS number: 68131-39-5	Alcohols, C12-15, ethoxylated	1-10
CAS number: 75-21-8	Ethylene oxide	<0.054
CAS number: 123-91-1	1,4-dioxane	<0.054
CAS number: 50-00-0	Formaldehyde	<0.036
CAS number: 79-43-6	Dichloroacetic acid	<0.036

Additional Information: None

SECTION 4: First-aid measures

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Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After skin contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

Immediate medical attention and special treatment

Specific treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

In case of skin contact, seek prompt medical attention while rinsing is continued.

In case of ingestion, seek prompt medical attention.

Notes for the doctor:

Not determined or not available.

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SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards during fire-fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging. Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Do not get in eyes. Avoid contact with skin and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

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Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Alberta	Formaldehyde	50-00-0	8-Hour TWA: 0.9 mg/m ³ (0.75 ppm)
	Formaldehyde	50-00-0	Ceiling Limit: 1.3 mg/m ³ (1 ppm)
	Dichloroacetic acid	79-43-6	TWA: 2.6 mg/m ³ (0.5 ppm)
	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm (1.8 mg/m ³)
	1,4-dioxane	123-91-1	8-Hour TWA: 72 mg/m ³ (20 ppm)
British Columbia	Formaldehyde	50-00-0	8-Hour TWA: 0.1 ppm
	Formaldehyde	50-00-0	15-Minute STEL: 0.3 ppm
	Dichloroacetic acid	79-43-6	TWA: 0.5 ppm
	Ethylene oxide	75-21-8	8-Hour TWA: 0.1 ppm
	Ethylene oxide	75-21-8	15-Minute STEL: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 20 ppm
Manitoba	Formaldehyde	50-00-0	8-Hour TWA: 0.1 ppm
	Formaldehyde	50-00-0	15-Minute STEL: 0.3 ppm
	Formaldehyde	50-00-0	STEL: 0.3 ppm
	Dichloroacetic acid	79-43-6	TWA: 0.5 ppm
	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 20 ppm
Ontario	Formaldehyde	50-00-0	15-Minute STEL: 1 ppm
	Formaldehyde	50-00-0	Ceiling Limit: 1.5 ppm
	Dichloroacetic acid	79-43-6	TWA: 0.5 ppm
	Ethylene oxide	75-21-8	TWA Exposure Limit Value: 1 ppm
	Ethylene oxide	75-21-8	15-Minute STEL: 10 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 20 ppm
Quebec	Formaldehyde	50-00-0	Ceiling Limit: 3 mg/m ³ (2 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Ethylene oxide	75-21-8	TWA Exposure Limit Value: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 72 mg/m ³ (20 ppm)
Saskatchewan	Formaldehyde	50-00-0	Ceiling Limit: 0.3 ppm
	Dichloroacetic acid	79-43-6	15-Minute Contamination Limit: 1.5 ppm
	Dichloroacetic acid	79-43-6	8-Hour Contamination Limit: 0.5 ppm
	Ethylene oxide	75-21-8	Level Limit Value: 1 ppm
	Ethylene oxide	75-21-8	15-Minute STEL: 2 ppm
	1,4-dioxane	123-91-1	15-Minute Contamination Limit: 30 ppm
	1,4-dioxane	123-91-1	8-Hour Contamination Limit: 20 ppm
New Brunswick	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 90 mg/m ³ (25 ppm)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. 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. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by

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recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Liquid
Odor:	Std.
Odor threshold:	Not determined or not available.
pH-value:	2
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	Not determined or not available.
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	Not determined or not available.
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

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Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

None known.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	oral	LD50 Rat: 4900 mg/kg
	dermal	LD50 Rat: > 2000 mg/kg
Sodium Xylenesulfonate	dermal	LD50 Rabbit: >= 2000 mg/kg
	oral	LD50 Rat: >= 3346 mg/kg
2-dodecoxyethyl hydrogen sulfate	oral	LD50 Rat: 1600 mg/kg
Alcohols, C12-15, ethoxylated	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rat: > 2000 mg/kg
Formaldehyde	oral	LD50 Rat: 100 mg/kg
	inhalation	LC50 Rat: <463 ppmV (4 hr (vapor))
	dermal	LD50 Rabbit: 270 mg/kg
Dichloroacetic acid	dermal	LD50 Rabbit: 797 mg/kg
	oral	LD50 Rat: 2820 mg/kg
Ethylene oxide	inhalation	LC50 Rat: 1450 ppmV (4 Hours (Gas))
	oral	LD50 Rat: 72 mg/kg
	Inhalation ATE	LC50 Rat: 700 ppmV ((Gases))
	Oral ATE	LD50 Rat: 100 mg/kg
1,4-dioxane	oral	LD50 Rat: 5150 mg/kg
	dermal	LD50 Rabbit: 7600 mg/kg
	inhalation	LC50 Rat: 9158 ppmV (4 hr - Vapor)

Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage.

Product data:

No data available.

Substance data:

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Name	Result
Sulphamidic acid	Causes skin irritation.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Causes skin irritation.
2-dodecoxyethyl hydrogen sulfate	Causes skin irritation.
Alcohols, C12-15, ethoxylated	Causes skin irritation.
Formaldehyde	Causes severe skin burns.
Dichloroacetic acid	Causes severe skin burns.
Ethylene oxide	Causes severe skin burns.

Serious eye damage/irritation

Assessment:

Causes serious eye damage.

Product data:

No data available.

Substance data:

Name	Result
Sulphamidic acid	Causes serious eye irritation.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Causes serious eye irritation.
Sodium Xylenesulfonate	Causes serious eye irritation.
2-dodecoxyethyl hydrogen sulfate	Causes serious eye irritation.
Alcohols, C12-15, ethoxylated	Causes serious eye damage.
Formaldehyde	Causes serious eye damage.
Dichloroacetic acid	Causes serious eye damage.
Ethylene oxide	Causes serious eye damage.
1,4-dioxane	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Formaldehyde	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

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Name	Species	Result
Formaldehyde		May cause cancer.
Ethylene oxide		May cause cancer.
1,4-dioxane		May cause cancer. 1,4-dioxane is characterized as "likely to be carcinogenic to humans." This characterization is based on the following findings: (1) inadequate evidence of carcinogenicity in humans, and (2) sufficient evidence in animals (i.e., hepatic tumors in multiple species [three strains of rats, two strains of mouse, and in guinea pigs] mesotheliomas of the peritoneum, mammary, and nasal tumors have also been observed in rats following 2 years of oral exposure to 1,4- dioxane). U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS).

International Agency for Research on Cancer (IARC):

Name	Classification
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Not Applicable
Sodium Xylenesulfonate	Not Applicable
2-dodecoxyethyl hydrogen sulfate	Not Applicable
Alcohols, C12-15, ethoxylated	Not Applicable
Formaldehyde	Group 1
Dichloroacetic acid	Group 2B
Ethylene oxide	Group 1
1,4-dioxane	Group 2B

National Toxicology Program (NTP):

Name	Classification
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Not Applicable
Sodium Xylenesulfonate	Not Applicable
2-dodecoxyethyl hydrogen sulfate	Not Applicable
Alcohols, C12-15, ethoxylated	Not Applicable
Formaldehyde	Known to be human carcinogens
Dichloroacetic acid	Reasonably anticipated to be human carcinogens
Ethylene oxide	Known to be human carcinogens
1,4-dioxane	Reasonably anticipated to be human carcinogens

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

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Substance data:

Name	Result
Formaldehyde	Suspected of causing genetic defects.
Ethylene oxide	May cause genetic defects.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Ethylene oxide	May damage fertility. Suspected of damaging the unborn child.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Formaldehyde	May cause respiratory irritation.
Ethylene oxide	May cause respiratory irritation. May cause drowsiness or dizziness.
1,4-dioxane	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Ethylene oxide	Studies on the effects of Ethylene oxide have concluded not only neurotoxic symptoms in humans, but also measured effects on nerve conduction velocities indicative of sensorimotor neuropathy, and axonal degeneration observed in nerve biopsies of exposed workers.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

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SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Fish LC50 Danio rerio: 2 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 6.4 mg/L (48 hr)
Sodium Xylenesulfonate	Aquatic Plants EC50 Selenastrum capricornutum: ≥ 758 mg/L (96 hr [growth rate; read-across])
	Fish LC50 Oncorhynchus mykiss: ≥ 1580 mg/L (96 hr [read-across])
	Aquatic Invertebrates EC50 Daphnia magna: > 1020 mg/L (48 hr [mobility; read-across])
Alcohols, C12-15, ethoxylated	Aquatic Invertebrates EC50 Daphnia magna: 0.14 mg/L (48 hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.75 mg/L (72 hr)
Dichloroacetic acid	Aquatic Invertebrates EC50 Daphnia magna: 106 mg/L (24 hr)
	Fish LC50 Marine water fish: > 2000 mg/L (96 hr)
	Aquatic Plants EC50 Marine water algae: 148.2 mg/L (72 hr)
Ethylene oxide	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 240 mg/L (96 h, read-across substance data)
	Aquatic Invertebrates LC50 Daphnia magna: 212 mg/L (48 h)
	Fish LC50 Pimephales promelas: 84 mg/L (96 h)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Alcohols, C12-15, ethoxylated	Fish NOEC Fathead minnow: 0.16 mg/L (10 days)
	Aquatic Invertebrates NOEC Daphnia magna: 0.77 mg/L (21 days)
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Aquatic Invertebrates NOEC Daphnia magna: 0.9 mg/L (21 d)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Readily biodegradable in water (50% degradation after 1 day; $> 90\%$ degradation after 5 days).
Alcohols, C12-15, ethoxylated	Readily biodegradable (61% degradation after 28 days).

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Name	Result
Sodium Xylenesulfonate	The substance is readily biodegradable. 83 - 85% degradation, measured by CO2 evolution, after 28 days.
Formaldehyde	Readily biodegradable (99% degradation after 28 days).
Dichloroacetic acid	This substance is readily biodegradable.
Ethylene oxide	Readily biodegradable (96% degradation after 28 days).
1,4-dioxane	Not readily biodegradable (< 10 % degradation after 29 days).

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not expected to bioaccumulate significantly (estimated BCF: 70.79 L/kg).
Formaldehyde	Accumulation in aquatic organisms is not to be expected.
Dichloroacetic acid	This substance has low potential for bioaccumulation.
Ethylene oxide	Low potential for bioaccumulation (logKow = -0.3).
1,4-dioxane	Does not accumulate in aquatic organisms (mean BCF: 0.45)

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is mobile to moderately mobile (experimental log Koc: 1.812 dimensionless; calculated Koc: 648 L/kg); therefore, moderate adsorption to soil can be expected.
Formaldehyde	Adsorption to solid soil phase is possible.
Dichloroacetic acid	This substance will not adsorb at all to soils or sediments should these environmental compartments be exposed to it.
1,4-dioxane	Significant adsorption to solid soil phase is not expected (calculated log Koc: 0.51 at 25 °C).

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Sulphamidic acid	This substance is not PBT.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not PBT.
Alcohols, C12-15, ethoxylated	Substance is not PBT.

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Sodium Xylenesulfonate	The substance is not PBT.
Formaldehyde	Not a PBT substance.
Dichloroacetic acid	This substance is not PBT.
Ethylene oxide	This substance is not PBT.
1,4-dioxane	This substance is not PBT.

vPvB assessment:

Sulphamidic acid	This substance is not vPvB.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not vPvB.
Alcohols, C12-15, ethoxylated	Substance is not vPvB.
Sodium Xylenesulfonate	The substance is not vPvB.
Formaldehyde	Not a vPvB substance.
Dichloroacetic acid	This substance is not vPvB.
Ethylene oxide	This substance is not vPvB.
1,4-dioxane	This substance is not vPvB.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:


It is the responsibility of the waste generator to characterize all waste materials according to regulatory entities.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	1760
UN proper shipping name	Corrosive Liquid, N.O.S., (Sulfamic Acid)
UN transport hazard class(es)	8 
Packing group	II
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL): All ingredients are listed or exempt.

Non-domestic substances list (NDSL): None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet