

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name MIRATAINE CBS 50G

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Detergent
- Emulsifier
- Cosmetics, personal care products
- Washing and cleaning products (including solvent based products)

1.3 Details of the supplier of the safety data sheet**Company**

Syensqo USA LLC.,
2564 US HIGHWAY 1, LAWRENCE, NJ 08648 USA,
Tel.: +1.609.860.4000

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): +1-800-424-9300 within the United States and Canada, or +1-703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture**HCS 2012 (29 CFR 1910.1200)**

Serious eye damage:

Category 1

2.2 Label elements**HCS 2012 (29 CFR 1910.1200)****Pictogram****Signal Word**

- Danger

Hazard Statements

- H318 Causes serious eye damage.

Precautionary Statements

Prevention

- P280

Wear eye protection/ face protection.

Response

- 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.

2.3 Other hazards which do not result in classification

- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Not applicable, this product is a mixture.

3.2 Mixture**Hazardous Ingredients and Impurities**

Chemical name	Identification number CAS-No.	Concentration [%]
1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-coco acyl derivs., inner salts	68139-30-0	>= 30 - < 40
1,2,3-Propanetriol	56-81-5	>= 1 - < 5
Amides, coco, N-[3-(dimethylamino)propyl]	68140-01-2	>= 0.5 - < 1

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First aid measures**4.1 Description of first-aid measures****General advice**

- First responder needs to protect himself.
- Show this safety data sheet to the doctor in attendance.
- Place affected apparel in a sealed bag for subsequent decontamination.
- When symptoms persist or in all cases of doubt seek medical advice.

In case of inhalation

- Move to fresh air.
- Keep at rest.
- Consult a physician if necessary.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with soap and plenty of water.
- Use a mild soap if available.
- If skin irritation occurs, seek medical advice/attention.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids.
- Take victim immediately to hospital.

- Continue rinsing eyes during transport to hospital.

In case of ingestion

- Do not induce vomiting without medical advice.
- Rinse mouth with water.
- Do not give anything to drink.
- Keep at rest.
- Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

- no data available

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Firefighting measures

Flash point > 200 °F (> 93 °C)
closed cup

Flammability class: Will burn

Autoignition temperature No data available

Flammability / Explosive limit No data available

5.1 Extinguishing media**Suitable extinguishing media**

- Extinguishing media - small fires
- Water spray
- Multipurpose powders
- Carbon dioxide (CO₂)
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)
- Extinguishing media - large fires
- Water spray
- Multipurpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

- The pressure in sealed containers can increase under the influence of heat.
- Aqueous liquid. Does not present any particular risk in the event of a fire.
- Hazardous decomposition products formed under fire conditions.

- (following evaporation of water)
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

Hazardous combustion products:

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NOx)
- Sulfur oxides

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

Specific fire fighting methods

- Stay upwind.
- Fight fire with normal precautions from a reasonable distance.
- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers / equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information

- Evacuate personnel to safe areas.
- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.
- Wear as appropriate:
 - Face-shield
 - Tightly fitting safety goggles.
- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapor formation use a respirator with an approved filter.
- Stop leak if safe to do so.
- If spillage occurs on the public highway, indicate the danger and notify the authorities (police, fire service).
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by diking.
- The product should not be allowed to enter drains, water courses or the soil.
- Local authorities should be advised if significant spillages cannot be contained.
- If the product contaminates rivers and lakes or drains inform respective authorities.
- If the spill area is porous, the contaminated material must be collected for subsequent treatment or disposal.
- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Wash nonrecoverable remainder with large amounts of water.
- Clean contaminated surface thoroughly.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of as hazardous waste in compliance with local and national regulations.

Additional advice

- Material can create slippery conditions.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Handle in accordance with good industrial hygiene and safety practice.
- Wear personal protective equipment.
- Wear suitable protective clothing.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Avoid splashes.
- Avoid formation of aerosol.
- For personal protection, see section 8.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Keep in a contained area
- The floor of the storage area should be impermeable and designed to form a water-tight basin.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer.
- Do not freeze.
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

Requirements for storage rooms and vessels

Recommended storage temperature: 41 - 86 °F (5 - 30 °C)

- Do not freeze.

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters**Components with workplace occupational exposure limits**

Components	Value type	Value	Basis
1,2,3-Propanetriol			National Institute for Occupational Safety and Health
1,2,3-Propanetriol	TWA	5 mg/m3	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
	Form of exposure : mist, respirable fraction		

1,2,3-Propanetriol	TWA	15 mg/m3	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
Form of exposure : mist, total dust			

8.2 Exposure controls

Control measures

Engineering measures

- Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :
- Effective exhaust ventilation system.
- Ensure adequate ventilation.
- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Avoid splashes.
- Avoid formation of aerosol.

Individual protection measures

Respiratory protection

- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.
- Use a respirator with an approved filter if a risk assessment indicates this is necessary.

Hand protection

- Where there is a risk of contact with hands, use appropriate gloves.
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Suitable material

- Nitrile rubber
- Neoprene
- PVC
- butyl-rubber

Eye protection

- Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.
- Eye contact should be prevented through the use of:
- Tightly fitting safety goggles.
- Face-shield

Skin and body protection

- Full protective suit
- Footwear protecting against chemicals.
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

- Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:
- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.

- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

Protective measures

- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.
- The protective equipment must be selected in accordance with current local regulations and in cooperation with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

<u>Physical state</u>	liquid
<u>Form</u>	Aqueous solution
<u>Color</u>	yellow
<u>Odor</u>	slight
<u>Odor Threshold</u>	No data available
<u>Melting point/freezing point</u>	<u>Freezing point</u> : < 32 °F (0 °C)
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range</u> : ca. 212 °F (100 °C)
<u>Flammability (solid, gas)</u>	No data available
<u>Flammability (liquids)</u>	No data available
<u>Flammability / Explosive limit</u>	No data available
<u>Flash point</u>	> 200 °F (> 93 °C) closed cup Flammability class: Will burn
<u>Autoignition temperature</u>	No data available
<u>Decomposition temperature</u>	No data available
<u>pH</u>	7.0 (10 %) Aqueous solution
<u>Viscosity</u>	No data available
<u>Solubility</u>	<u>Water solubility</u> : soluble
<u>Partition coefficient: n-octanol/water</u>	No data available
<u>Vapor pressure</u>	ca. 20.00 mmHg (26.66 hPa) (77 °F (25 °C))
<u>Density</u>	No data available
<u>Relative density</u>	1.126 (77 °F (25 °C))

<u>Relative vapor density</u>	> 1
<u>Particle characteristics</u>	No data available
<u>Evaporation rate (Butylacetate = 1)</u>	No data available
9.2 Other information	
<u>Non Volatiles by Weight</u>	> 48 %

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No dangerous reaction known under conditions of normal use.
- Hazardous polymerization does not occur.

10.4 Conditions to avoid

- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

- Strong oxidizing agents
- Strong reducing agents
- Strong acids
- Strong bases

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis), releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Nitrogen oxides (NOx)
- Sulfur oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

LD50 : 2,950 mg/kg - Rat , male and female
Method: OECD Test Guideline 401
By analogy
tested on C8-C18
Unpublished reports
Gavage
May be harmful if swallowed.

LD50: 4,100 mg/kg - Mouse
Unpublished internal reports

Acute inhalation toxicity

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

No data available

Acute dermal toxicity

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

LD50 : > 2,000 mg/kg - Rat , male and female
Method: OECD Test Guideline 402
By analogy
tested on C8-C18
Semioclusive
No mortality observed at this dose.
Unpublished internal reports

Acute toxicity (other routes of administration)

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

No data available

Skin corrosion/irritation

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Rabbit
No skin irritation
Method: OECD Test Guideline 404
By analogy
tested on C8-C18
Semioclusive
Unpublished reports

Serious eye damage/eye irritation

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Rabbit
Irreversible effects on the eye
Method: OECD Test Guideline 405
By analogy
tested on C8-C18
Unpublished reports

Risk of serious damage to eyes.

Respiratory or skin sensitization

Maximization Test - Guinea pig
Does not cause skin sensitization.
Method: OECD Test Guideline 406
By analogy
Unpublished reports

Mutagenicity**Genotoxicity in vitro**

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Ames test
with and without metabolic activation

negative
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
By analogy
tested on C8-C18
Unpublished reports

Chromosome aberration test in vitro
Strain: Human lymphocytes
with and without metabolic activation

negative
Method: OECD Test Guideline 473
By analogy
tested on C8-C18
Unpublished internal reports

Gene mutation assays in mammalian cells.
Strain: mouse lymphoma cells
with and without metabolic activation

negative
Method: OECD Test Guideline 476
By analogy
tested on C8-C18
Unpublished internal reports

Genotoxicity in vivo

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

In vivo micronucleus test - Rat
male
Oral
Method: according to a standardized method

negative
By analogy
tested on C8-C18
Gavage
Unpublished internal reports

Carcinogenicity

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

No data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA

Toxicity for reproduction and development

Toxicity to reproduction / fertility

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Reproduction / developmental toxicity screening test - Rat, male and female, Oral
Fertility NOEL: 300 mg/kg
Method: OECD Test Guideline 422
By analogy, tested on C8-C18, Gavage, No toxicity to reproduction, Unpublished internal reports

Developmental Toxicity/Teratogenicity

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Pre-natal - Rat, Oral
General Toxicity Maternal NOAEL: 66.7 mg/kg
Teratogenicity NOAEL: 600mg/kg
Embryo-fetal toxicity. NOAEL: 600 mg/kg
Method: OECD Test Guideline 414
By analogy, tested on C8-C18, Gavage, Unpublished internal reports, The product is not considered to be toxic for development.

STOT

STOT-single exposure

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1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria., Internal evaluation.
By analogy

STOT-repeated exposure

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria., Internal evaluation.
By analogy, tested on C8-C18

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Oral 90-day - Rat , male and female
NOAEL: 600 mg/kg
Method: OECD Test Guideline 408
By analogy
Gavage
tested on C8-C18
Unpublished internal reports
No data available
No data available

Experience with human exposure
Aspiration toxicity

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

LC50 - 96 h : 2.1 - 2.66 mg/l - Pimephales promelas (fathead minnow)
static test
Analytical monitoring: no

Method: OECD Test Guideline 203
category approach
Toxic to fish.
tested on C8-C18
tested on C12-C18
Unpublished internal reports

LC50 - 96 h : 2.1 mg/l - Pimephales promelas (fathead minnow)
Method: OECD Test Guideline 203
Toxic to aquatic organisms.
Unpublished internal reports

LC50 - 96 h : > 0.23 mg/l - Fish: Scophthalmus maximus
semi-static test
Analytical monitoring: no

Method: OSPARCOM Guidelines (1995)
Marine species
By analogy
tested on C8-C18
Unpublished internal reports

Acute toxicity to daphnia and other aquatic invertebrates

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1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

EC50 - 48 h : 4 mg/l - Daphnia magna (Water flea)
static test
Analytical monitoring: no
Method: Directive 67/548/EEC, Annex V, C.2.
By analogy
Toxic to aquatic invertebrates.
tested on C12-C18
Unpublished internal reports

EC50 - 48 h : 4.1 mg/l - Daphnia magna (Water flea)
Method: Tested according to Directive 92/69/EEC.
Toxic to aquatic organisms.
Unpublished internal reports

EC50 - 48 h : 5.6 mg/l - Crustacean: Acartia tonsa
static test
Analytical monitoring: no
Method: according to a standardized method
Marine species
By analogy
tested on C8-C18
Unpublished internal reports

Toxicity to aquatic plants

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

ErC50 - 72 h : 2.26 mg/l - Skeletonema costatum (marine diatom)
static test
Analytical monitoring: no
Method: ISO 10253
Marine species
By analogy
Toxic to algae.
tested on C8-C18
Unpublished internal reports

ErC50 - 72 h : 2.3 mg/l - Skeletonema costatum (marine diatom)
Method: ISO 10253
Toxic to aquatic organisms.
Unpublished internal reports

NOEC - 72 h : 0.76 mg/l - Skeletonema costatum (marine diatom)
static test
Analytical monitoring: no
Method: ISO 10253
Marine species
By analogy
Harmful to algae with long lasting effects.
tested on C8-C18
Unpublished internal reports

Toxicity to microorganisms

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

NOEC - 3 h : >= 1,000 mg/l - activated sludge
static test
Analytical monitoring: no
Method: OECD Test Guideline 209
By analogy
tested on C8-C18
Unpublished internal reports

Chronic toxicity to fish

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

EC10: 0.075 mg/l - 32 d - Pimephales promelas (fathead minnow)
flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 210
By analogy
tested on C8-C18
Unpublished reports

Chronic toxicity to daphnia and other aquatic invertebrates

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

NOEC: 1.05 mg/l - 21 d - Daphnia magna (Water flea)
semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 211
By analogy
No adverse chronic effect observed up to and including the threshold of 1 mg / L.
tested on C8-C18
Unpublished internal reports

Sediment compartment

Toxicity to benthic organisms

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

NOEC: 697.3 mg/kg dry weight (d.w.) Exposure duration: 10 Days
Species: Corophium volutator
Method: OSPARCOM Guidelines (2005)
Marine species, By analogy, tested on C8-C18, Unpublished internal reports

12.2 Persistence and degradability

Abiotic degradation

No data available

Physical- and photo-chemical elimination

No data available

Biodegradation

Biodegradability

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Ready biodegradability study:
The substance fulfills the criteria for ultimate aerobic biodegradability and ready
biodegradability
Expert judgment and weight of evidence determination.
tested on C12
tested on C12-C18
tested on C8-C18
Unpublished internal reports

Method: OECD Test Guideline 310
> 60 % - 28 Days
Readily biodegradable.
Unpublished internal reports

Ultimate aerobic biodegradability
Method: OECD Test Guideline 306
57 % - 28 d
Theoretical carbon dioxide production
Inoculum: Sea water
Conc. in standard unit mg / l: 8.29 mg/l
By analogy

tested on C8-C18
Unpublished internal reports

Degradability assessment

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential**Partition coefficient: n-octanol/water**

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Not potentially bioaccumulable

Bioconcentration factor (BCF)

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Bioconcentration factor (BCF): < 100
Not bioaccumulable.
Structure-activity relationship (SAR)

12.4 Mobility in soil**Adsorption potential (Koc)**

No data available

Known distribution to environmental compartments

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Ultimate destination of the product: Soil

Water

12.5 Results of PBT and vPvB assessment

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Not persistent, bioaccumulative, and toxic (PBT).
Not very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects**Ecotoxicity assessment****Short-term (acute) aquatic hazard**

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Toxic to aquatic life.

Long-term (chronic) aquatic hazard

1-Propanaminium, N-(3-aminopropyl)-
2-hydroxy-N,N-dimethyl-3-sulfo-, N-
coco acyl derivs., inner salts

Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal*****Prohibition***

- Do not discharge directly into the environment.
- Do not dispose of with domestic refuse.
- Dispose of as hazardous waste in compliance with local and national regulations.
- Chemical additions, processing or otherwise altering this material may make the waste management information

presented in this SDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Waste Code

- Environmental Protection Agency
- Hazardous Waste – NO

Advice on cleaning and disposal of packaging***Prohibition***

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.
- Clean using steam.
- Monitor the residual vapors.
- Dispose of rinse water in accordance with local and national regulations.
- Containers that cannot be cleaned must be treated as waste.
- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.
- In accordance with IMDG regulations containers or tankers that have not been cleaned or deodorized and that previously contained a hazardous product, must either be labeled or have hazard signs.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

49 CFR

14.1 UN number	UN 3082
14.2 Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Cocamidopropyl Hydroxysultaine)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	Marine Pollutant

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TDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cocamidopropyl Hydroxysultaine)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	Marine Pollutant

NOM

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cocamidopropyl Hydroxysultaine)
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
ERG No	171
14.5 Environmental hazards	YES
Marine pollutant	

IMDG

14.1 UN number	UN 3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cocamidopropyl Hydroxysultaine)
IMDG Code segregation group	Not Relevant
14.3 Transport hazard class	9
Label(s)	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
Marine pollutant	

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14.6 Special precautions for user

EmS

F-A , S-F

For personal protection, see section 8.

14.7 Transport in bulk vessels according to IMO instruments

No data available

IATA**14.1 UN number**

UN 3082

14.2 Proper shipping name

Environmentally hazardous substance, liquid, n.o.s. (Cocamidopropyl Hydroxysultaine)

14.3 Transport hazard class

9

Label(s):

9

14.4 Packing group

Packing group

III

Packing instruction (cargo aircraft)

964

Max net qty / pkg

450.00 L

Packing instruction (passenger aircraft)

964

Max net qty / pkg

450.00 L

14.5 Environmental hazards

YES

14.6 Special precautions for user

For personal protection, see section 8.

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory: Listed introduction
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- One or more components not listed on inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory

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Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
Korea. Act on Registration and Evaluation of Chemicals	- When purchased from a Syensqo legal entity based in Korea, this product is compliant with "Act on Registration and Evaluation of Chemicals" (AREC or K-REACH, Article 10) as all its components are either excluded, exempt, and/or (pre)registered. When purchased from a legal entity outside of Korea, please contact your local representative for additional information.
EU. European Registration, Evaluation, Authorization and Restriction of Chemical (REACH)	- When purchased from a Syensqo legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.

15.2 Federal Regulations

US. EPA EPCRA SARA Title III**SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)**

Serious eye damage or eye irritation	Yes
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The categories not mentioned are not relevant for the product.

Section 313 Toxic Chemicals (40 CFR 372.65)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 302 Emergency Planning Extremely Hazardous Substance Threshold Planning Quantity (40 CFR 355)

This material does not contain any components with a section 302 EHS TPQ.

Section 302 Emergency Planning Extremely Hazardous Substance Reportable Quantity (40 CFR 355)

This material does not contain any components with a SARA 302 RQ.

Section 304 Emergency Release Notification Reportable Quantity (40 CFR 355)

This material does not contain any components with a section 304 EHS RQ.

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

15.3 State Regulations**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information**NFPA (National Fire Protection Association) - Classification**

Health	2 moderate
Flammability	1 slight
Instability or Reactivity	0 minimal

HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification

Health	2 moderate
Flammability	1 slight
Reactivity	0 minimal
PPE	Determined by User; dependent on local conditions

Further information

- Distribute new edition to clients

Date Prepared: 07/29/2025

Key or legend to abbreviations and acronyms used in the safety data sheet

- PEL: Permissible exposure limit
- TWA: 8-hour time weighted average
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- NIOSH: National Institute for Occupational Safety and Health
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- STOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. The information exclusively relates to the designated product in its unaltered state. Safety and health hazards may change if such product is used in combination with other materials or in any other manufacturing process. Users are responsible for compliance with all regulations linked to product related activities, and to use the products in accordance with technical instructions given by Syensqo, if any.