

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

- Trade name FENTACARE 2231MS I90

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

- Cosmetics, personal care products

Remarks

- This product may rapidly contribute towards a highly hazardous environment within a confined space (e.g. Within ISO tanks, reactors, silos, etc.).
- Risk assessments should be conducted prior to handling this product / material.

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

Zhuhai Syensqo Specialty Chemicals Co., Ltd.
No.3, Lianhua Road, Nanshui Town, Jinwan District, Zhuhai 519050 Guangdong, People's Republic of China.
Tel: +86 756 7869100
Fax: +86 756 7869114

E-mail address

For questions about SDS content: manager.sds@syensqo.com
For all other topics use: www.syensqo.com/en/form/documentation

1.4 Emergency telephone number

400 120 6011 (toll-free, access from China only)
NRCC
CHINA (DOMESTIC ONLY): +86 532 8388 9090 (Qingdao)
MULTI LINGUAL EMERGENCY NUMBER (24/7)
Europe/Latin America/Africa: +44 1235 239 670 (UK)
Middle East/Africa speaking Arabic: +44 1235 239 671 (UK)
Asia Pacific : +65 3158 1074 (Singapore)
China : 400 120 6011 (toll-free, access from China only)
North America : +1 800 424 9300

SECTION 2: Hazards identification**2.1 Emergency overview****Appearance**

Form: pellets
 Physical state: solid (25 °C)
 Colour: white

Odour: characteristic

May be harmful if swallowed or in contact with skin., Causes skin irritation., Causes serious eye damage., May cause damage to organs (Gastrointestinal tract) through prolonged or repeated exposure if swallowed., Very toxic to aquatic life., Toxic to aquatic life with long lasting effects.

2.2 Classification of the substance or mixture**GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)**

Acute toxicity, Category 5	H303: May be harmful if swallowed.
Acute toxicity, Category 5	H313: May be harmful in contact with skin.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - repeated exposure Category 2	H373: May cause damage to organs through prolonged or repeated exposure if swallowed. (Gastrointestinal tract), Oral
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.3 Label elements**GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)****Hazardous products which must be listed on the label**

- CAS-No. 81646-13-1 1-Docosanaminium, N,N,N-trimethyl-, methyl sulfate
- CAS-No. 93164-85-3 Amines, C20-22-alkyldimethyl

Pictogram**Signal word**

- Danger

Hazard statements

- | | |
|---------------|--|
| - H303 + H313 | May be harmful if swallowed or in contact with skin. |
| - H315 | Causes skin irritation. |
| - H318 | Causes serious eye damage. |
| - H373 | May cause damage to organs (Gastrointestinal tract) through prolonged or repeated exposure if swallowed. |
| - H400 | Very toxic to aquatic life. |
| - H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statements**General**

- None

Prevention

- P260 Do not breathe dust.
- P264 Wash skin thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ eye protection/ face protection.

Response

- P302 + P352 IF ON SKIN: Wash with plenty of water.
- 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.
- P312 Call a POISON CENTER/ doctor if you feel unwell.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P391 Collect spillage.

Storage

- None

Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

2.4 Physical and chemical hazards

- Not classified based on available information.

2.5 Health hazards

May be harmful if swallowed. May be harmful in contact with skin. Causes skin irritation. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure if swallowed.

2.6 Environmental hazards

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

2.7 Other hazards which do not result in classification

None known.

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

- Not applicable, this product is a mixture.

3.2 Mixture

Information on Components and Impurities

Chemical name	CAS-No.	Identification number	GHS Classification	Concentration [%]
1-Docosanaminium, N,N,N-trimethyl-, methyl sulfate	81646-13-1	Not applicable	Acute toxicity, Category 5; H303 Acute toxicity, Category 5; H313 Skin irritation, Category 2; H315 Serious eye damage, Category 1; H318 Specific target organ toxicity - repeated exposure, Category 2; H373 (Gastrointestinal tract) Short-term (acute) aquatic hazard, Category 1; H400 Long-term (chronic) aquatic hazard, Category 2; H411 M-Factor(Acute) : 1	>= 70 - < 80
Isopropanol	67-63-0	Not applicable	Flammable liquids, Category 2; H225 Eye irritation, Category 2A; H319 Specific target organ toxicity - single exposure, Category 3; H336 (Narcotic effects)	>= 15 - < 20
Amines, C20-22-alkyldimethyl	93164-85-3	Not applicable	Acute toxicity, Category 4; H302 Skin corrosion, Category 1B; H314 Serious eye damage, Category 1; H318 Short-term (acute) aquatic hazard, Category 1; H400 Long-term (chronic) aquatic hazard, Category 1; H410 M-Factor(Acute) : 100 M-Factor(Chronic) : 10	>= 1 - < 2.5

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

- First aider needs to protect himself.
- Show this safety data sheet to the doctor in attendance.
- Place affected clothing 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.
- Consult a physician.
- 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.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms**

- Symptoms will depend on the target organs.

4.3 Indication of any immediate medical attention and special treatment needed

- no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- Multi-purpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)
- Water mist

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.
- High pressure inert gas, e.g. carbon dioxide jet.
- (Avoid dispersal of dust in the air)

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

- The pressure in sealed containers can increase under the influence of heat.
- In case of heating:
 - Harmful or toxic vapours are released.
- Hazardous decomposition products formed under fire conditions.
- 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)

- Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

- Wear full protective clothing and self-contained breathing apparatus.
- 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 vapour 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 brigade).
- For further information refer to section 8 "Exposure controls/personal protection".

6.2 Environmental precautions

- This material is a low melting point solid
- 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 bunding.
- 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.

6.3 Methods and materials for containment and cleaning up

- This material is a low melting point solid
- Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Molten form
- Allow to solidify.
- Wash non-recoverable 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

- No conditions to be specially mentioned.

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.
- Handling molten product:
 - Avoid splashes.
 - Avoid formation of aerosol.
- If it is handled as a liquid, there is significant hazard of 1st, 2nd and 3rd degree burns
- For personal protection, see section 8.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.
- Exposed employees should have regular medical check-ups

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 bunded 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.
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: Stability-Reactivity).

Packaging material**Suitable material**

- Plastic materials.

Requirements for storage rooms and vessels

Recommended storage temperature: 4 - 40 °C

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Components with national occupational exposure limits**

Components	Value type	Value	Basis
Isopropanol	PC-TWA	350 mg/m3	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.
Isopropanol	PC-STEL	700 mg/m3	Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

Components with other occupational exposure limits

Components	Value type	Value	Basis
Isopropanol	TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)
Isopropanol	STEL	400 ppm	USA. ACGIH Threshold Limit Values (TLV)

Biological Exposure Indices

Components	Value type	Value	Basis
Isopropanol	BEI	40 mg/l Acetone Urine End of shift at end of workweek	ACGIH - Biological Exposure Indices (BEI)
	Nonspecific Background		

8.2 Exposure controls

Control measures

Engineering measures

- 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.
- Handling molten product:
- 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.
- Recommended Filter type: Organic vapour type
- Respirator must be worn if exposed to dust.

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.
- Use only personal protective equipment that conforms to international/ national standards (KOSHA, etc.).

Suitable material

- Nitrile rubber

Eye protection

- Tightly fitting safety goggles.
- Face-shield
- Handling molten product:
- 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

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.
- Exposed employees should have regular medical check-ups

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.

Environmental exposure controls

- This material is a low melting point solid
- 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 bunding.
- 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.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

<u>Physical state</u>	solid (25 °C)
<u>Form</u>	pellets
<u>Colour</u>	white
<u>Odour</u>	characteristic
<u>Odour Threshold</u>	No data available
<u>Melting point/freezing point</u>	<u>Melting point/ range:</u> > 70 °C
<u>Initial boiling point and boiling range</u>	No data available
<u>Flammability (solid, gas)</u>	The product is not flammable. Method: UN N.1 method
<u>Flammability (liquids)</u>	No data available
<u>Flammability/Explosive limit</u>	No data available
<u>Flash point</u>	Not applicable ca. 25 °C closed cup Molten form
<u>Auto-ignition temperature</u>	No data available
<u>Decomposition temperature</u>	No data available
<u>pH</u>	7.0 - 9.0 (1 %)

	Aqueous alcohol solution
<u>Viscosity</u>	No data available
<u>Solubility</u>	<u>Water solubility:</u> soluble
	<u>Solubility in other solvents:</u> Methanol: soluble
	Ethanol: soluble
	Isopropanol: soluble
	Acetone: soluble
<u>Partition coefficient: n-octanol/water</u>	No data available
<u>Vapour pressure</u>	No data available
<u>Density</u>	No data available
<u>Relative density</u>	No data available
<u>Relative vapor density</u>	No data available
<u>Particle characteristics</u>	No data available
<u>Evaporation rate (Butylacetate = 1)</u>	No data available
9.2 Other information	
<u>Oxidizing properties</u>	Not considered as oxidizing, Structure-activity relationship (SAR)
<u>Molecular weight</u>	ca. 476 g/mol

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.

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
- In contact with concentrated aqueous solution of strong bases (NaOH, KOH, ...etc.), may over time release:
- Methanol

10.6 Hazardous decomposition products

Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

The product has a low acute toxicity

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Acute inhalation toxicity

Not classified as hazardous for acute inhalation toxicity according to GHS.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Acute dermal toxicity

The product has a low acute toxicity

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Acute toxicity (other routes of administration)

Not applicable

Skin corrosion/irritation

Irritating to skin.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Serious eye damage/eye irritation

Risk of serious damage to eyes.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Respiratory or skin sensitisation

Does not cause skin sensitisation.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Mutagenicity

Genotoxicity in vitro

Product is not considered to be genotoxic.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Genotoxicity in vivo

Product is not considered to be genotoxic.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Carcinogenicity

The product is not considered to be carcinogenic.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Toxicity for reproduction and development

Toxicity to reproduction/Fertility

The product is not considered to affect fertility.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

Developmental Toxicity/Teratogenicity

The product is not considered to be toxic for development.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

STOT

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

STOT - repeated exposure

Exposure routes: Ingestion
Target Organs: Gastrointestinal tract
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2 according to GHS criteria.

According to the available data on the components.
According to the classification criteria for mixtures.
Unpublished reports and/or published data.

1-Docosanaminium, N,N,N-trimethyl-,
methyl sulfate

By analogy
Not considered to cause serious damage to health on repeated exposure
Unpublished reports

Isopropanol

Inhalation (vapour) two-year - Rat , male and female
: 500 ppm
Target Organs: No specific target organs noted
Method: OECD Test Guideline 451
Chronic exposure
Not considered to cause serious damage to health on repeated exposure
Unpublished reports

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

The product itself has not been tested. Global ecotoxicity assessment available below.

Acute toxicity to daphnia and other aquatic invertebrates

The product itself has not been tested. Global ecotoxicity assessment available below.

Toxicity to aquatic plants

The product itself has not been tested. Global ecotoxicity assessment available below.

Toxicity to microorganisms

The product itself has not been tested.

Chronic toxicity to fish

The product itself has not been tested. Global ecotoxicity assessment available below.

Chronic toxicity to daphnia and other aquatic invertebrates

The product itself has not been tested. Global ecotoxicity assessment available below.

Sediment compartment

Toxicity to benthic organisms

The product itself has not been tested.

Terrestrial Compartment

Toxicity to soil dwelling organisms

The product itself has not been tested.

Toxicity to terrestrial plants

The product itself has not been tested.

Toxicity to above ground organisms

The product itself has not been tested.

M-Factor

1-Docosanaminium, N,N,N-trimethyl-,
methyl sulfate

Acute aquatic toxicity = 1
(according to the Globally Harmonized System (GHS))

Amines, C20-22-alkyldimethyl

Acute aquatic toxicity = 100
 Chronic aquatic toxicity = 10
 (according to the Globally Harmonized System (GHS))

12.2 Persistence and degradability**Abiotic degradation****Stability in water**

Conclusion is not possible for a mixture as a whole.

Photodegradation

Conclusion is not possible for a mixture as a whole.

Physical- and photo-chemical elimination**Physico-chemical removability**

Conclusion is not possible for a mixture as a whole.

Biodegradation**Biodegradability**

As (bio)degradability is not relevant for mixtures, all the components of the mixture were assessed individually (rapid degradability assessment available below).

Degradability assessment

All or most of the components are considered to be rapidly degradable in the environment

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

1-Docosanaminium, N,N,N-trimethyl-, methyl sulfate

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

Isopropanol

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

Bioconcentration factor (BCF)

At least one of the components is considered to be potentially bioaccumulable.

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

Conclusion is not possible for a mixture as a whole.

Known distribution to environmental compartments

1-Docosanaminium, N,N,N-trimethyl-, methyl sulfate

Ultimate destination of the product : Water

Sediment

Isopropanol

Ultimate destination of the product : Water

Air

Method: Estimation method / Structure-activity relationship (SAR)

Predicted distribution to environmental compartments

Published data

12.5 Results of PBT and vPvB assessment

Product does not contain substances which are persistent, bioaccumulative, and toxic (PBT) at levels of 0.1% or higher.

Product does not contain substances which are very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Ecotoxicity assessment**Short-term (acute) aquatic hazard**

According to the available data on the components
Very toxic to aquatic life.

According to the classification criteria for mixtures.
Unpublished reports
Published data

Long-term (chronic) aquatic hazard

According to the available data on the components
Toxic to aquatic life with long lasting effects.

According to the classification criteria for mixtures.
Unpublished reports
Published data

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.

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 vapours.
- 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, which have not been cleaned or deodorized and which previously contained a hazardous product, must either be labelled or have hazard signs.
- In accordance with RID/ADR regulations containers or tankers, which have not been cleaned or deodorized and which previously contained a hazardous product, must either be labelled 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**CN DG**

14.1 UN number	UN 3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Docosyltrimethyl ammonium methyl sulphate, amines, C20-22-alkyldimethyl)
14.3 Transport hazard class	9
Label(s):	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
14.6 Special precautions for user	
For personal protection, see section 8.	

IMDG

14.1 UN number	UN 3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Docosyltrimethyl ammonium methyl sulphate, amines, C20-22-alkyldimethyl)
IMDG Code segregation group	Ammonium compounds (SGG2)
14.3 Transport hazard class	9
Label(s):	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
Marine pollutant	
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 3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Docosyltrimethyl ammonium methyl sulphate, amines, C20-22-alkyldimethyl)
14.3 Transport hazard class	9
Label(s):	9
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
14.6 Special precautions for user	
Packing instruction (cargo aircraft)	956
Max net qty/pkg	400.00 kg
Packing instruction (passenger aircraft)	956
Max net qty/pkg	400.00 kg

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 transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Following last version of regulations are applicable for the chemical classification, SDS and label:**

- General Rule for classification and hazard communication of chemicals, GB 13690
- Rules for classification and labelling of chemicals, GB30000.2~GB30000.29
- General rules for preparation of precautionary label for chemicals, GB 15258
- Safety data sheet for chemical products—Content and order of sections, GB/T 16483
- Decree No. 591 of the State Council of the People's Republic of China: Regulations on the Control over Safety of Hazardous Chemicals
- List of dangerous goods GB12268
- Classification and code of dangerous goods GB6944

Other regulations

- Law on the Prevention and Control of Occupational Diseases

Notification status

Inventory Information	Status
United States TSCA Inventory	- One or more components not listed on inventory - This product is regulated under the United States Food and Drug Act (FDA).
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australian Inventory of Industrial Chemicals (AIIC)	- Listed on Inventory
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)	- One or more components not listed on inventory
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.
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.
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.

SECTION 16: Other information**Full text of H-Statements**

- H225: Highly flammable liquid and vapour.
- H302: Harmful if swallowed.
- H303: May be harmful if swallowed.
- H313: May be harmful in contact with skin.
- H314: Causes severe skin burns and eye damage.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.
- H411: Toxic to aquatic life with long lasting effects.

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

- PC-STEL: Permissible concentration - short term exposure limit
- PC-TWA: Permissible concentration - time weighted average
- STEL: Short-term exposure limit
- TWA: 8-hour, time-weighted average
- 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 Instructions 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.
- GHS/CLP/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.

Further information

- Distribute new edition to clients

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. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.