

ANTAROX LF 330

Revision Date 08/21/2024

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

- Trade name ANTAROX LF 330

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

- Surfactants for various applications

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**

Solvay USA LLC.,
504 CARNEGIE CENTER PRINCETON NJ 08540, 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)**

Corrosive to Metals, Category 1
Acute toxicity, Category 4
Serious eye damage, Category 1
Carcinogenicity, Category 1B

H290: May be corrosive to metals.
H302: Harmful if swallowed.
H318: Causes serious eye damage.
H350: May cause cancer.

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

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- Danger

Hazard Statements

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H318 Causes serious eye damage.
- H350 May cause cancer.

Precautionary StatementsPrevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P234 Keep only in original container.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- P390 Absorb spillage to prevent material damage.

Storage

- P405 Store locked up.
- P406 Store in corrosive resistant container with a resistant inner liner.

Disposal

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

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****Hazardous Ingredients and Impurities**

Chemical name	Identification number CAS-No.	Concentration [%]
Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-	61702-77-0	>= 90 - < 95
Hydrochloric acid	7647-01-0	>= 1 - < 5
1,4-Dioxane	123-91-1	>= 0.3 - < 0.5

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

Non Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [%]
Water	7732-18-5	4- 6

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

- Plan first aid action before beginning work with this product.
- First responder needs to protect himself.
- Rescuers should wear PPE during rescue and decontamination of victims.
- Do not leave the victim unattended until the arrival of medical responders.
- Show this material safety data sheet to the doctor in attendance.
- Place affected apparel in a sealed bag for subsequent decontamination.
- Medical evaluation and/or advice necessary even only on suspicion of exposure to this product.

In case of inhalation

- Rescuers should put on appropriate protective gear for rescue.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Keep patient warm and at rest.
- Consult a physician.
- Get medical attention immediately if symptoms occur.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with plenty of water.
- Get medical attention immediately if symptoms occur.

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

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 >399 °F (204 °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
- Carbon dioxide (CO₂)
- Multipurpose powders
- Alcohol-resistant foam
- Extinguishing media - large fires
- Water spray
- Multipurpose powders
- Alcohol-resistant foam

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.
- In case of heating:
- Harmful or toxic vapors 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).
- Hydrogen chloride

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**

- Immediately evacuate personnel to safe areas.
- Stay upwind.
- Only qualified personnel equipped with suitable protective equipment may intervene.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.
- Wear respiratory protection.
- Wear as appropriate:
 - Faceshield or an appropriate full face protection.
- Ventilate the area.
- Stop leak if safe to do so.
- If spillage occurs on the public highway, indicate the danger and notify the authorities (police, fire service).
- Isolate spill or leak area in a radius of at least 50 meters.
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

- 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.
- 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).
- Control the vapors with:
 - Alcohol-resistant foam
- Soak up with inert absorbent material.
- 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 in accordance with local regulations.

Additional advice

- Possible need to alert the neighborhood.
- Mark the contaminated area with signs and prevent access to unauthorized personnel.
- Only qualified personnel equipped with suitable protective equipment may intervene.
- Ventilate the area.
- Following decontamination, the use of appropriate Personal Protective Equipment may be required to enter the affected area for several hours to avoid exposure to any leftover residues.
- 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.
- Risk assessments, along with appropriate identification and implementation of the corresponding risk controls, are to be conducted by competent person(s) on the intended work processes involving this product.
- This product may rapidly contribute towards a highly hazardous environment within a confined space (e.g. Within ISO tanks, reactors, silos, etc.).
- This product / material has CMR (Carcinogenicity, Mutagenicity, Reproductive toxicity) related hazards.
- Pregnant or breastfeeding workers should not be exposed to this product.
- The product must only be handled by specifically trained employees.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Vapor extraction at source.
- Do not use in areas without adequate ventilation.
- Extracted air must not be allowed to return to the workplace.

- Advice on safe handling
- If dust production may be expected from further processing, handling or by other means:
 - Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
 - Provide for appropriate exhaust ventilation and dust collection at machinery.
 - Dust must be extracted directly at the point of origin.
 - Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
- Any anticipated splash and/or aerosol generation should be contained using suitable engineering controls.
- Ethylene oxide may collect in container head space.
- Provide adequate ventilation.
- Wear personal protective equipment.
- Wear suitable protective clothing.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Do NOT handle without gloves.
- 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.
- The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.
- Air sampling and / or biological monitoring of the substances shown in Section 8.1 are to be conducted using methods accepted by local competent authorities responsible for workplace safety and health.

7.2 Conditions for safe storage, including any incompatibilities

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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 locked up or in an area accessible only to qualified or authorized persons.
- 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.

Unsuitable material

- Uncoated metals

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
Hydrochloric acid	C	2 ppm	American Conference of Governmental Industrial Hygienists
Hydrochloric acid	C	5 ppm 7 mg/m3	National Institute for Occupational Safety and Health
Hydrochloric acid	C	5 ppm 7 mg/m3	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
1,4-Dioxane	C	1 ppm 3.6 mg/m3	National Institute for Occupational Safety and Health
		Potential Occupational Carcinogen	
1,4-Dioxane	TWA	20 ppm	American Conference of Governmental Industrial Hygienists

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		Danger of cutaneous absorption	
1,4-Dioxane	TWA	100 ppm 360 mg/m3	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
		Skin designation	

NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)

Components	CAS-No.	Concentration
Hydrochloric acid	7647-01-0	50 parts per million
1,4-Dioxane	123-91-1	500 parts per million

8.2 Exposure controls**Control measures****Engineering measures**

- Risk assessments, along with appropriate identification and implementation of the corresponding risk controls, are to be conducted by competent person(s) on the intended work processes involving this product.
- 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 :
 - Facilities and equipment easily cleanable.
 - Use mechanical handling to reduce human contact with materials.
 - Use closed processing systems or containment technologies.
 - Enclosure and / or isolation of emission source.
 - Effective exhaust ventilation system.
 - Extract at emission point.
 - Ensure adequate ventilation.
 - Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Any anticipated splash and/or aerosol generation should be contained using suitable engineering controls.
- If dust production may be expected from further processing, handling or by other means:
 - Dust must be extracted directly at the point of origin.
 - Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

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.
- If mist is formed:
- If vapor is released:
- Wear a positive-pressure supplied-air respirator with full facepiece.

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

- Neoprene
- Nitrile rubber
- 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:
 - Faceshield or an appropriate full face protection.

Skin and body protection

- Lightweight protective clothing.
- 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.
- The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.
- Air sampling and / or biological monitoring of the substances shown in Section 8.1 are to be conducted using methods accepted by local competent authorities responsible for workplace safety and health.

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 (68 °F (20 °C))
<u>Color</u>	colorless to pale yellow
<u>Odor</u>	slight Do not attempt to smell the product as it is hazardous.
<u>Odor Threshold</u>	No data available
<u>Melting point/freezing point</u>	No data available
<u>Initial boiling point and boiling range</u>	No data available
<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>	> 399 °F (204 °C) closed cup Flammability class: Will burn
<u>Autoignition temperature</u>	No data available
<u>Decomposition temperature</u>	No data available
<u>pH</u>	2.1 (10 % (m/v)) Aqueous solution
<u>Viscosity</u>	No data available
<u>Solubility</u>	<u>Water solubility:</u> soluble <u>Solubility in other solvents:</u> not determined
<u>Partition coefficient: n-octanol/water</u>	No data available
<u>Vapor pressure</u>	No data available
<u>Density</u>	1.04 g/cm ³ (68 °F (20 °C))
<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)
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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

- May be corrosive to metals.

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

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis), releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Hydrogen chloride

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

This product is classified as acute toxicity category 4

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

Acute inhalation toxicity

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

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

Acute dermal toxicity

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

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

Acute toxicity (other routes of administration)

Not applicable

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Skin corrosion/irritation

Not classified as irritating to skin.

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

Serious eye damage/eye irritation

Risk of serious damage to eyes.

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

Respiratory or skin sensitization

Does not cause skin sensitization.

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

Mutagenicity**Genotoxicity in vitro**

Product is not considered to be genotoxic.

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

Genotoxicity in vivo

Product is not considered to be genotoxic.

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

Carcinogenicity

Hydrochloric acid

Rat
Inhalation
Exposure time: two-year
Method: OECD Test Guideline 451
No carcinogenic effects have been observed
Published data

Components	CAS-No.	Rating	Basis
1,4-Dioxane	123-91-1	Reasonably anticipated to be a human carcinogen	NTP
1,4-Dioxane	123-91-1	Group 2B: Possibly carcinogenic to humans	IARC

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

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

The product is not considered to affect fertility.

According to the available data on the constituents, According to the classification criteria for mixtures., Unpublished reports, Published data

Developmental Toxicity/Teratogenicity

The product is not considered to be toxic for development.

According to the available data on the constituents, According to the classification criteria for mixtures., Unpublished reports, Published data

STOT**STOT-single exposure**

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

According to the available data on the constituents, According to the classification criteria for mixtures., Unpublished reports, Published data

STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.

According to the available data on the constituents, According to the classification criteria for mixtures., Unpublished reports, Published data

The product itself has not been tested.

Experience with human exposure

No data available

CMR effects**Carcinogenicity**

Hydrochloric acid

Not classified as a carcinogen according to GHS criteria

1,4-Dioxane

Classified as carcinogen category 1B according to GHS criteria

Mutagenicity

Hydrochloric acid

Not classified as mutagen according to GHS criteria.

Aspiration toxicity

Not classified for aspiration toxicity according to GHS criteria.

Aspiration toxicity

According to the available data on the constituents, According to the classification criteria for mixtures., Internal evaluation.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment**

Acute toxicity to fish

No data available

Acute toxicity to daphnia and other aquatic invertebrates

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Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-

Daphnia magna (Water flea)
Expert judgment
Unpublished internal reports
Toxic to aquatic invertebrates.**Toxicity to aquatic plants**

No data available

Toxicity to microorganisms

No data available

Chronic toxicity to fish

No data available

Chronic toxicity to daphnia and other aquatic invertebrates

No data available

12.2 Persistence and degradability**Abiotic degradation**

No data available

Physical- and photo-chemical elimination

No data available

Biodegradation**Biodegradability**

Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-

The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability
Expert judgment
Unpublished internal reports**Degradability assessment**

Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-

The product is not considered to be rapidly degradable in the environment

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

No data available

Bioconcentration factor (BCF)

No data available

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

No data available

Known distribution to environmental compartments

No data available

12.5 Results of PBT and vPvB assessment

No data available

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

Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-

Toxic to aquatic life.

Long-term (chronic) aquatic hazard

Poly(oxy-1,2-ethanediyl), .alpha.-(2-chloroethyl)-.omega.-(decyloxy)-

Toxic to aquatic life with long lasting effects.

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

- Dispose of in accordance with local 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.

Prohibition

- Do not discharge directly into the environment.
- Do not dispose of with domestic refuse.

Waste Code

- Environmental Protection Agency
- Hazardous Waste – NO

Advice on cleaning and disposal of packaging

- 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.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

Prohibition

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.

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 1760
14.2 Proper shipping name	CORROSIVE LIQUIDS, N.O.S. (Hydrochloric acid, Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)
14.3 Transport hazard class	8
Label(s)	8
14.4 Packing group	

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Packing group III
ERG No 154

14.5 Environmental hazards
Marine pollutant YES
Marine Pollutant (Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)

14.6 Special precautions for user

This product contains one or more ingredients identified as a hazardous substance in Appendix A of 49 CFR 172.101.

Reportable quantities : RQ substance: 1,4-dioxane
RQ limit for substance: 100 lb
RQ limit for product: 25,000 lb

TDG

14.1 UN number UN 1760

14.2 Proper shipping name CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)

14.3 Transport hazard class 8
Label(s) 8

14.4 Packing group
Packing group III
ERG No 154

14.5 Environmental hazards
Marine pollutant YES
Marine Pollutant (Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)

NOM

14.1 UN number UN 1760

14.2 Proper shipping name CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)

14.3 Transport hazard class 8
Label(s) 8

14.4 Packing group
Packing group III
ERG No 154

14.5 Environmental hazards
Marine pollutant YES

IMDG

14.1 UN number UN 1760

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14.2 Proper shipping name	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)
IMDG Code segregation group	Acids (SGG1)
14.3 Transport hazard class	8
Label(s)	8
14.4 Packing group	
Packing group	III
14.5 Environmental hazards	YES
Marine pollutant	
14.6 Special precautions for user	
EmS	F-A , S-B

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 1760
14.2 Proper shipping name	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, Poly(oxy-1,2-ethanediyl), α -(2-chloroethyl)- ω -(decyloxy)-)
14.3 Transport hazard class	8
Label(s):	8
14.4 Packing group	
Packing group	III
Packing instruction (cargo aircraft)	856
Max net qty / pkg	60.00 L
Packing instruction (passenger aircraft)	852
Max net qty / pkg	5.00 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
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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	- One or more components not listed on inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- 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
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.

15.2 Federal Regulations

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

Corrosive to Metals	Yes
Acute toxicity (any route of exposure)	Yes
Serious eye damage or eye irritation	Yes
Carcinogenicity	Yes

The categories not mentioned are not relevant for the product.

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Section 313 Toxic Chemicals (40 CFR 372.65)

The following components are subject to reporting levels established by SARA Title III, Section 313. This information must be included in all SDSs that are copied and distributed for this material.

Components	CAS-No.	Concentration
1,4-Dioxane	123-91-1	0.4 %
Hydrochloric acid	7647-01-0	1- 2%

The following components are subject to reporting levels established by SARA Title III, Section 313. This information must be included in all SDSs that are copied and distributed for this material.

1,4-Dioxane	123-91-1	0.1- 1%
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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)

Components	CAS-No.	Reportable quantity
Ethylene Oxide	75-21-8	10 lb

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

Components	CAS-No.	Reportable quantity
Ethylene Oxide	75-21-8	10 lb

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

Components	CAS-No.	Reportable quantity
1,4-Dioxane	123-91-1	100 lb
Hydrochloric acid	7647-01-0	5000 lb
Ethylene Oxide	75-21-8	10 lb

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

This product can expose you to chemicals including 1,4-Dioxane (CAS # 123-91-1), Ethylene Oxide (CAS # 75-21-8) , which is/are known to the State of California to cause cancer, and

This product can expose you to chemicals including Ethylene Oxide (CAS # 75-21-8) , which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

Health	2 moderate
Flammability	1 slight
Instability or Reactivity	0 minimal

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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

- Product evaluated under the US GHS format.
- Distribute new edition to clients
- Update
- See section 2
- See section 14

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

- C: Ceiling limit
- 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.

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.