



Safety Data Sheet

FOR REGULATORY AND SDS QUESTIONS (U.S. AND CANADA):
CALL THE PRODUCT STEWARDSHIP LINE
1- 908-791-2336 9 AM TO 6 PM ET (Mon-Fri)

Section 1. Identification

Product name : 2110P SAPONIFIER
Product code : 116377
Product type : Liquid.
Date of issue/Date of revision : January 22 2020.

Manufacturer - Supplier	Telephone no.:	Emergency phone:
Alpha Assembly Solutions Inc. Global Headquarters 300 Atrium Drive Somerset, New Jersey 08873	Toll Free: (800) 367-5460 Main Phone: (908) 791-3000	DOMESTIC NORTH AMERICA 202-464-2554
ALPHA METALS MEXICO SA DE CV Ave Nafta 800, Parque Industrial STIVA Apodaca NL 66600 Mexico	Tel: +52 81 1156-6602	Tel: 01 800 022 1400 Tel: +52 55 5559-1588
Alpha Assembly Solutions Brasil Soldas Ltda Rio Jaguarão, 1540 - Vila Buriti Manaus Amazonas 69072-055 Brasil	Tel: 55 92 3614-7400	Tel: 55 92 3614-7423

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION (Unborn child) - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) - Category 2
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms



Signal word

: Danger

Continued on next page

Section 2. Hazards identification

- Hazard statements** :
- Harmful in contact with skin or if inhaled.
 - Causes severe skin burns and eye damage.
 - May cause an allergic skin reaction.
 - May damage the unborn child.
 - May cause respiratory irritation.
 - May cause damage to organs through prolonged or repeated exposure. (kidneys)
 - Toxic to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** :
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
- Response** :
- Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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 or physician.
- Storage** :
- Store locked up.
- Disposal** :
- Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** :
- Do not taste or swallow. Wash thoroughly after handling.
- Hazards not otherwise classified** :
- Causes digestive tract burns.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Amines	50-60	-
Proprietary Glycol	30-40	-
Solvent.	1-10	-
surfactant	1-10	-
surfactant	0.1-1.0	-
ethanediol	0.1-1.0	107-21-1

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** :
- Get medical attention immediately. Call a poison center or physician. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Chemical burns must be treated promptly by a physician.

Continued on next page

Section 4. First aid measures

- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Causes severe burns. Harmful in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Continued on next page

Section 4. First aid measures

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Continued on next page

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Storage temperature: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Amines	<p>ACGIH TLV (United States, 3/2017). STEL: 15 mg/m³ 15 minutes. STEL: 6 ppm 15 minutes. TWA: 7.5 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p> <p>NIOSH REL (United States, 10/2016). STEL: 15 mg/m³ 15 minutes. STEL: 6 ppm 15 minutes. TWA: 8 mg/m³ 10 hours. TWA: 3 ppm 10 hours.</p> <p>OSHA PEL (United States, 6/2016). TWA: 6 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). STEL: 15 mg/m³ 15 minutes. STEL: 6 ppm 15 minutes. TWA: 8 mg/m³ 8 hours.</p>

Continued on next page

Section 8. Exposure controls/personal protection

Proprietary Glycol ethanediol	<p>TWA: 3 ppm 8 hours.</p> <p>ACGIH TLV (United States, 3/2017). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor</p> <p>ACGIH TLV (United States, 3/2017). STEL: 10 mg/m³ 15 minutes. Form: Inhalable fraction. Aerosol only. STEL: 50 ppm 15 minutes. Form: Vapor fraction TWA: 25 ppm 8 hours. Form: Vapor fraction</p> <p>OSHA PEL 1989 (United States, 3/1989). CEIL: 125 mg/m³ CEIL: 50 ppm</p>
----------------------------------	---

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Clear. Blue.
Odor	: Ammonia. [Slight]
Odor threshold	: Not available.
pH	: 13.4
Melting point	: Not available.
Boiling point	: >35°C (>95°F)
Flash point	: Closed cup: >93°C (>199.4°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1
Solubility	: Soluble in the following materials: cold water and hot water.
VOC	: 945 g/l
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 410°C (770°F)
Decomposition temperature	: Not available.
Viscosity	: Not available.

Aerosol product

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Incompatibility with various substances	: Extremely reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials, metals and acids. Slightly reactive or incompatible with the following materials: combustible materials, alkalis and moisture. Acetic anhydride
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Other Hazardous decomposition products	: carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ etc.), Ammonia.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
<u>Acute toxicity</u>	

Continued on next page

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Amines	LC50 Inhalation Vapor	Cat	>2420 mg/m ³	2 hours
	LC50 Inhalation Vapor	Mouse	>2420 mg/m ³	2 hours
	LD50 Dermal	Rabbit	1 mL/kg	-
	LD50 Oral	Rat	1720 mg/kg	-
	LDLo Oral	Mammal	1400 mg/kg	-
Proprietary Glycol	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
Solvent. surfactant	LD50 Oral	Rat	1350 mg/kg	-
	LD50 Dermal	Rabbit	>3000 mg/kg	-
surfactant	LD50 Oral	Rat	2745 mg/kg	-
	LC50 Inhalation Vapor	Rat	>20 mg/l	1 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
ethanediol	LD50 Oral	Rat	4600 mg/kg	-
	LD50 Oral	Rat	4700 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Amines	Eyes - Severe irritant	Rabbit	-	250 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	505 milligrams	-
Proprietary Glycol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
Solvent.	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	0.1 Milliliters	-
surfactant	Skin - Mild irritant	Rabbit	-	0.5 Grams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
ethanediol	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 milligrams	-
	Skin - Mild irritant	Rabbit	-	555 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

No applicable toxicity data

Additional information:

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
ethanediol	-	-	Equivocal	Rat - Female	Oral: 50 g/kg	-
	-	-	Equivocal	Rat - Female	Oral: 8580 mg/kg	-

Teratogenicity

Continued on next page

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Amines	Positive - Oral	Rat - Female	500 mg/kg During Pregnancy	-

Specific target organ toxicity

Name	Category	Route of exposure	Target organs
Amines	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethanediol	Category 2	Oral	kidneys

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : Harmful if inhaled. May cause respiratory irritation.
Skin contact : Causes severe burns. Harmful in contact with skin. May cause an allergic skin reaction.
Ingestion : Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness

Inhalation : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Ingestion : Adverse symptoms may include the following:
 stomach pains
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Continued on next page

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2173.1 mg/kg
Dermal	1527.4 mg/kg
Inhalation (vapors)	11.56 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Amines	Acute EC50 8.42 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute LC50 >100000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
Proprietary Glycol surfactant	Acute LC50 170 mg/l Fresh water	Fish - Carassius auratus	96 hours
	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute EC50 91 mg/l	Daphnia	48 hours
	Acute LC50 36 mg/l	Fish	96 hours
ethanediol	Acute LC50 6900000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41000000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Amines	-1.31	-	low
Proprietary Glycol	1	-	low
Solvent.	-0.2	-	low
surfactant	2.8	-	low
ethanediol	-1.36	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.








Continued on next page

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	UN	IMDG	IATA
UN number	UN3267	UN3267	UN3267	UN3267	UN3267	UN3267
UN proper shipping name	Corrosive liquid, basic, organic, n.o.s. (Amines)	Corrosive liquid, basic, organic, n.o.s. (Amines)	Corrosive liquid, basic, organic, n.o.s. (Amines)	Corrosive liquid, basic, organic, n.o.s. (Amines)	Corrosive liquid, basic, organic, n.o.s. (Amines)	Corrosive liquid, basic, organic, n.o.s. (Amines)
Transport hazard class(es)	8 	8 	8 	8 	8  	8 
Packing group	III	III	III	III	III	III
Environmental hazards	No.	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information - DOT Classification Additional information - IMDG Classification	ERG# 153 The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.					
Additional information - IATA Classification	The environmentally hazardous substance mark may appear if required by other transportation regulations.					

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Continued on next page

Section 14. Transport information

Section 15. Regulatory information

- U.S. Federal regulations** : TSCA 5(a)2 proposed significant new use rules: Solvent.
TSCA 5(a)2 final significant new use rule (SNUR): No products were found.
TSCA 12(b) one-time export: Solvent.
TSCA 12(b) annual export notification: No products were found.
- United States inventory (TSCA 8b)** : All components are listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

- Classification** : Immediate (acute) health hazard
Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Proprietary Glycol ethanediol	- 107-21-1	30-40 0.1-1
Supplier notification	Proprietary Glycol ethanediol	- 107-21-1	30-40 0.1-1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

- Canada inventory** : Not determined.

International lists

National inventory

- Australia** : Not determined.
China : Not determined.
Europe : All components are listed or exempted.
Japan : Not determined.
Malaysia : Not determined.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.
Thailand : Not determined.
Turkey : Not determined.
Viet Nam : Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	3
Flammability	1
Physical hazards	0

Procedure used to derive the classification

Classification	Justification
Acute Tox. 4, H312	Calculation method
Acute Tox. 4, H332	Calculation method
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
Skin Sens. 1, H317	Calculation method
Repr. 1B, H360 (Unborn child)	Calculation method
STOT SE 3, H335	Calculation method
STOT RE 2, H373 (kidneys)	Calculation method
Aquatic Acute 2, H401	Calculation method
Aquatic Chronic 2, H411	Calculation method

History

Date of issue/Date of revision	: January 22 2020.
Date of previous issue	: March 12 2019.
Version	: 2.03
Prepared by	: Regulatory Affairs Department enthone.msds@macdermidenthone.com

Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
-----------------------------	--

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.