

LACTUCA LT 2 AP

SDS # : 085582

Section 1. Identification

CAS number : Not applicable.
UN number : Not regulated.
EC number : Mixture.
GHS product identifier : LACTUCA LT 2 AP

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Metalworking fluid

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Section 2. Hazard identification

Classification of the substance or mixture : SKIN IRRITATION - Category 2
 SERIOUS EYE DAMAGE - Category 1
 SKIN SENSITIZATION - Category 1
 AQUATIC TOXICITY (ACUTE) - Category 3
 AQUATIC TOXICITY (CHRONIC) - Category 3

GHS label elements

Hazard pictograms :



Signal word :

Hazard statements :

Danger
 Causes skin irritation.
 May cause an allergic skin reaction.
 Causes serious eye damage.
 Harmful to aquatic life with long lasting effects.

Precautionary statements

- Prevention** : Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

Additional information : Mineral oil of petroleum origin. Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	Identifiers	%
N-bis(2-hydroxyethyl)oleamide	CAS: 93-83-4 EC: 202-281-7	≤5
Sulfonic acids, petroleum, sodium salts	CAS: 68608-26-4 EC: 271-781-5	≤5
Resin acids and Rosin acids, potassium salts	CAS: 61790-50-9 EC: 263-142-4	≤5
N,N'-methylenebismorpholine	CAS: 5625-90-1 EC: 227-062-3	≤3
Butanedioic acid, polyisobutenyl derivs.	CAS: 68610-89-9 EC: 614-666-0	≤3
Tall oil, potassium salt	CAS: 68647-71-2 EC: 271-968-1	≤3
Tall oil, compd. with diethanolamine	CAS: 68092-28-4 EC: 268-452-3	≤3
2-phenoxyethanol	CAS: 122-99-6 EC: 204-589-7	≤3
Alcohols, C12-14	CAS: 80206-82-2 EC: 279-420-3	<1

Component : % (w/w)

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- 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 vapors 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 skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 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. 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** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : ☒ pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : ☒ pain or irritation
redness
dryness
cracking
blistering may occur
- Ingestion** : ☒ stomach pains

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

- 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 fumes 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 dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- 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 harmful 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** : ☒ Carbon monoxide
carbon dioxide
nitrogen oxides
Sodium oxides
sulfur oxides
Hydrogen sulfide
Mercaptans

- 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.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

See Section 10 for incompatible materials before handling or use.

- 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** : 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. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, 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.

Advisory OEL : Metalworking fluids: USA: NIOSH (REL) TWA 0.5 mg/m³ Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

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: Tightly-fitting goggles or face shield.

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.
Hydrocarbon-proof gloves
Fluorinated rubber
nitrile rubber
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.

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.

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

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

Appearance

Physical state : Liquid.
Color : Orange. [Dark]
Odor : Characteristic.
Odor threshold : Not available.
pH : Not available.
Melting point/freezing point : Not available.
Boiling point : Not available.
Flash point : Not available.
Evaporation rate : Not available.



TotalEnergies

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Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.88 [ASTM D 4052]
Density	: 0.88 g/cm ³ [15°C] [ASTM D 4052]
Solubility(ies)	:

Media	Result
Water	Not soluble

Miscible with water	: No.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): 52.18 mm ² /s (52.18 cSt) [ASTM D 445]
Flow time (ISO 2431)	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: carbon monoxide carbon dioxide nitrogen oxides Sodium oxides sulfur oxides Hydrogen sulfide Mercaptans

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/substance	Result
N,N-bis(2-hydroxyethyl)oleamide	Rabbit - Dermal - LD50 >2000 mg/kg
Sulfonic acids, petroleum, sodium salts	Rat - Oral - LD50 >5 g/kg OECD [401] <u>Toxic effects:</u> Gross Metabolite Changes - Weight loss or decreased weight gain
Resin acids and Rosin acids, potassium salts	Rabbit - Dermal - LD50 >5000 mg/kg OECD [402] Rat - Inhalation - LC50 Dusts and mists >1.9 mg/l [4 hours] OECD [Acute Inhalation Toxicity]
N,N'-methylenebismorpholine	Rat - Oral - LD50 >2000 mg/kg OECD [423] Rat - Dermal - LD50 >2000 mg/kg OECD [402] Rabbit - Dermal - LD50 1100 mg/kg Rat - Oral - LD50 550 mg/kg Rat - Inhalation - LC50 Dusts and mists 1.5 mg/l [4 hours]
Tall oil, compd. with diethanolamine	Rat - Dermal - LD50 >2000 mg/kg 402 Rat - Oral - LD50 >2000 mg/kg 420
2-phenoxyethanol	Rat - Oral - LD50 1260 mg/kg <u>Toxic effects:</u> Behavioral - General anesthetic Gastrointestinal - Other changes Kidney, Ureter, and Bladder - Other changes Rat - Dermal - LD50 14422 mg/kg <u>Toxic effects:</u> Lung, Thorax, or Respiration - Acute pulmonary edema Rat - Oral - LD50 1850 mg/kg OECD [401] Rabbit - Dermal - LD50 5000 mg/kg Rat - Inhalation - LC50 Dusts and mists 5.1 mg/l [4 hours]
Alcohols, C12-14	Rat - Oral - LD50 >2000 mg/kg OECD [401]

Acute toxicity estimates



TotalEnergies

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Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
LACTUCA LT 2 AP	15738.8	29411.8	N/A	N/A	66.0
N,N-bis(2-hydroxyethyl)oleamide	N/A	2500	N/A	N/A	N/A
Resin acids and Rosin acids, potassium salts	2500	2500	N/A	N/A	N/A
N,N'-methylenebismorpholine	550	N/A	N/A	N/A	1.5
Tall oil, compd. with diethanolamine	2500	2500	N/A	N/A	N/A
2-phenoxyethanol	1394	5000	N/A	N/A	5.1
Alcohols, C12-14	2500	N/A	N/A	N/A	N/A

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

Skin corrosion/irritation

Based on available data, the classification criteria are met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are met.

Respiratory corrosion/irritation

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

Respiratory or skin sensitization

Skin

Based on available data, the classification criteria are met.

Respiratory

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ toxicity (single exposure)

2-phenoxyethanol

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

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

Specific target organ toxicity (repeated exposure)

N,N'-methylenebismorpholine

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (gastrointestinal tract, respiratory tract) - Category 2

Tall oil, compd. with diethanolamine

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

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

Aspiration hazard

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

**Information on the likely routes of exposure**

Not available.

Potential acute health effects**Eye contact**

Causes serious eye damage.

Inhalation

No known significant effects or critical hazards.

Skin contact

Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics**Eye contact**☒ pain
watering
redness**Inhalation**

No specific data.

Skin contact☒ pain or irritation
redness
dryness
cracking
blistering may occur**Ingestion**☒ stomach pains**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.

Long term exposure**Potential immediate effects**

Not available.

Potential delayed effects

Not available.

Potential chronic health effects**General**

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. 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.

Reproductive toxicity

: No known significant effects or critical hazards.

Other information

:

Not available.



Section 12. Ecological information

Harmful to aquatic life with long lasting effects.

Toxicity

Product/ingredient name	Result
N,N-bis(2-hydroxyethyl)oleamide	Acute - EC50 OECD [202] Daphnia - Daphnia 3.2 mg/l [48 hours] Acute - EC50 Algae - Algae - <i>Scenedesmus subspicatus</i> 18.6 mg/l [72 hours] Acute - LC50 OECD [203] Fish - <i>Danio rerio</i> 5.1 mg/l [96 hours] Chronic - NOEC OECD [211] Daphnia - <i>Daphnia magna</i> 0.1 mg/l [21 days]
Sulfonic acids, petroleum, sodium salts	Acute - EC50 Algae - <i>Pseudokirchnerella subcapitata</i> >1000 mg/l [72 hours] Acute - EC50 Daphnia - <i>Daphnia magna</i> >1000 mg/l [48 hours]
Tall oil, potassium salt	Acute - EC50 Daphnia 2.4 mg/l [48 hours]
Tall oil, compd. with diethanolamine	Acute - EC50 201 Algae - <i>Pseudokirchneriella subcapitata</i> 20 mg/l [72 hours] Acute - EC50 202 Daphnia - <i>Daphnia mania</i> 4.1 mg/l [48 hours]
2-phenoxyethanol	Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 32 days; <u>Size</u> : 18.3 mm; <u>Weight</u> : 0.107 g 344 mg/l [96 hours] <u>Effect</u> : Mortality Acute - EC50 Algae - <i>Desmodesmus subspicatus</i> 501 mg/l [72 hours] Acute - LC50 Fish 344 mg/l [96 hours] Acute - EC50 Daphnia - <i>Daphnia magna</i> 501 mg/l [48 hours] Acute - NOEC OECD [201] Daphnia - <i>Daphnia magna</i> 9.43 mg/l [21 days] Acute - EC50

Alcohols, C12-14	Micro-organism
	880 mg/l [17 hours]
	Acute - EC50
	Micro-organism
	32.4 mg/l [5 minutes]
	Acute - EC50
	OECD [201]
	Algae - <i>Pseudokirchneriella subcapitata</i>
	20.5 mg/l [72 hours]
	Acute - LC50
	QSAR
	Fish
	0.525 mg/l [96 hours]

Based on available data, the classification criteria are met.

Persistence and degradability

Product/substance	Aquatic half-life	Photolysis	Biodegradability
N,N-bis(2-hydroxyethyl) oleamide	-	-	Readily
Sulfonic acids, petroleum, sodium salts	-	-	Not readily
2-phenoxyethanol	-	-	Readily
Alcohols, C12-14	-	-	Readily

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
N,N-bis(2-hydroxyethyl) oleamide	5.51	-	High
Resin acids and Rosin acids, potassium salts	5.046	-	High
N,N'-methylenebismorpholine	-1.53	-	Low
Tall oil, potassium salt	5.64 to 7.22	-	High
Tall oil, compd. with diethanolamine	4.39	-	High
2-phenoxyethanol	1.2	0.3493	Low

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Mobility in soil

: Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited. Forms an emulsion.

Other adverse effects

: No known significant effects or critical hazards.

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

	UN	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Toxic classification (TCVN 3164-79) : 3

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDL)	: Not determined.
China inventory (IECSC)	: Not determined.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: Not determined.
Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: Not determined.
Vietnam inventory	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Section 16. Other information

Ratings of danger according to

NFPA



HMIS

Health	*	3
Flammability		0
Physical hazards		0

History

Date of revision	: 2026/02/06
Previous revision date	: 2024/01/04
Version	: 2.01
Key to abbreviations	: ACGIH = American Conference of Governmental Industrial Hygienists ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor EC50 = Half maximal effective concentration EL50 = median Effective Loading IATA = International Air Transport Association IC50 = Half maximal inhibitory concentration IDHL = Immediately dangerous to life or health IMDG = International Maritime Dangerous Goods LC50 = Median lethal concentration LD50 = Median lethal dose

LL50 = median Lethal Loading
 LogKow = logarithm of the octanol/water partition coefficient
 N/A = Not available
 NIOSH = National Institute of Occupational Safety and Health
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 NOEL = No Observed Effect Level
 NOELR = No observed Effect Loading Rate
 OECD = Organisation for Economic Co-operation and Development
 OEL = Occupational Exposure Limit
 OSHA = Occupational Safety and Health Administration.
 PMT = Persistent, Mobile and Toxic
 POP = Persistent Organic Pollutants
 polyvinyl alcohol (PVA)
 QSAR = Quantitative Structure–Activity Relationship
 REL = Recommended Exposure Limit
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 STEL = Short Term Exposure Limit
 TLV = Threshold Limit Value
 TWA = Time Weight Average
 VOC = Volatile Organic Compound
 UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material

Procedure used to derive the classification

Classification	Justification
SKIN IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
AQUATIC TOXICITY (ACUTE) - Category 3	Calculation method
AQUATIC TOXICITY (CHRONIC) - Category 3	Calculation method

References : Not available.

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.