



SAFETY DATA SHEET

According to HSNO Approved Code of Practice 8-1 09-06

LACTUCA LT 2 AP

SDS #: 084386

Section 1. Identification

Product name : LACTUCA LT 2 AP

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

Identified uses

Metalworking fluid

Supplier's details

TOTAL OIL NEW ZEALAND
56 Whakatu Road, Whakatu
Hastings 4172
NEW ZEALAND
Phone: +64 (06) 871 53 25
Fax: +64 (06) 870 48 90
TotalEnergies Marketing Asia-Pacific Middle East Pte. Ltd.
182 Cecil Street
#27-01 Frasers Tower
Singapore 069547
Tel: +65 6879 2200
ms.ap-sds@totalenergies.com

Emergency telephone number

Asia-Pacific: +65 3158 1074
New Zealand Poisons Information Centre: 0800 764 766

e-mail address of person responsible for this SDS : ms.ap-sds@totalenergies.com

Section 2. Hazards identification

HSNO Classification : 6.3 - SKIN IRRITATION - Category A
8.3 - CORROSIVE TO OCULAR TISSUE - Category A
6.5 - SENSITIZATION - Category B (Skin)
9.1 - AQUATIC ECOTOXICITY - Category C

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

GHS label elements

Signal word : Danger

Hazard statements : 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** : Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Take off contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/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.
- Symbol** :



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

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥ 75 - ≤ 90	64742-54-7
N,N-bis(2-hydroxyethyl)oleamide	≥ 1 - ≤ 3	93-83-4
Sulfonic acids, petroleum, sodium salts	≥ 1 - ≤ 3	68608-26-4
Resin acids and Rosin acids, potassium salts	≥ 1 - ≤ 3	61790-50-9
N,N'-methylenebismorpholine	≥ 1 - ≤ 3	5625-90-1
Butanedioic acid, polyisobutenyl derivs.	≥ 1 - ≤ 3	68610-89-9
Tall oil, potassium salt	≥ 1 - ≤ 3	68647-71-2
Tall oil, compd. with diethanolamine	≥ 1 - ≤ 3	68092-28-4
Distillates (petroleum), hydrotreated heavy naphthenic	≥ 1 - ≤ 3	64742-52-5
2-phenoxyethanol	≥ 0.3 - ≤ 1	122-99-6
Alcohols, C12-14	≥ 0.3 - ≤ 1	80206-82-2

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

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

- Inhalation** : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes 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.



- Ingestion** : Get medical attention immediately. 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.
- Skin contact** : Get medical attention immediately. 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.
- Eye contact** : Get medical attention immediately. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye damage.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
stomach pains
- Skin** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
- Eyes** : Adverse symptoms may include the following:
pain
watering
redness

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

- Specific treatments** : Not available.
- 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.
- 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** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : 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 dioxide.
carbon monoxide
Hydrogen sulfide
Mercaptans
Sodium oxides
sulfur oxides
- Hazchem code** : Not available.
- Special precautions 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** : 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 (see Section 8).
- 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. 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.
- 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** : Put on appropriate personal protective equipment (see Section 8). 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. 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.
- 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Distillates (petroleum), hydrotreated heavy paraffinic

NZ HSWA 2015 (New Zealand, 11/2020).

WES-TWA: 5 mg/m³ 8 hours. Form: Mist

WES-STEL: 10 mg/m³ 15 minutes. Form: Mist

Distillates (petroleum), hydrotreated heavy naphthenic

NZ HSWA 2015 (New Zealand, 11/2020).

WES-TWA: 5 mg/m³ 8 hours. Form: Mist

WES-STEL: 10 mg/m³ 15 minutes. Form: Mist

Advisory OEL : 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)

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.

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.

Respiratory protection : Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces. In case of inadequate ventilation wear respiratory protection: Type A/P1 Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.



- 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
Impermeable butyl rubber gloves
Neoprene 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.
- Eye 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** : 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.

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.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point** : Not available.
- Flash point** : Open cup: 215°C (419°F) [ASTM D 92]
- 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** : 0.881 [ASTM D 4052]
- Density** : 0.881 g/cm³ [15°C]
- Solubility** : Soluble in the following materials: cold water and hot water.
- Miscible with water** : Yes.
- Solubility in water** : Soluble



Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 55.3 mm ² /s (55.3 cSt) [ASTM D 445]
Flow time (ISO 2431)	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

Section 10. Stability and reactivity

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	: No specific data.
Hazardous decomposition products	: Carbon dioxide. carbon monoxide Hydrogen sulfide Mercaptans Sodium oxides sulfur oxides

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	: Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: No specific data.
Ingestion	: Adverse symptoms may include the following: stomach pains
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur
Eye contact	: Adverse symptoms may include the following: pain watering redness

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

Acute toxicity



Product/substance	Result	Species	Dose	Exposure	Test
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401 Acute Oral Toxicity
N,N-bis(2-hydroxyethyl) oleamide	LD50 Dermal	Rabbit	>2000 mg/kg	-	-
Sulfonic acids, petroleum, sodium salts	LC50 Inhalation Dusts and mists	Rat	>1.9 mg/l	4 hours	OECD 403 Acute Inhalation Toxicity
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5 g/kg	-	OECD 401
N,N'-methylenebismorpholine	LC50 Inhalation Dusts and mists	Rat	1.5 mg/l	4 hours	-
	LD50 Dermal	Rabbit	1100 mg/kg	-	-
	LD50 Oral	Rat	550 mg/kg	-	-
Tall oil, compd. with diethanolamine	LD50 Dermal	Rat	>2000 mg/kg	-	402
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>2000 mg/kg	-	420
	LC50 Inhalation Dusts and mists	Rat	5.54 mg/l	4 hours	OECD 403
2-phenoxyethanol	LD50 Dermal	Rabbit	2500 mg/kg	-	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	5000 mg/kg	-	-
	LD50 Dermal	Rat	14422 mg/kg	-	-
Alcohols, C12-14	LD50 Oral	Rat	1260 mg/kg	-	-
	LD50 Oral	Rat	1850 mg/kg	-	OECD 401
	LD50 Oral	Rat	>2000 mg/kg	-	OECD 401

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
N,N-bis(2-hydroxyethyl) oleamide Sulfonic acids, petroleum, sodium salts	Skin - Moderate irritant	Rabbit	-	300 uL	-
	Eyes - Irritant	Rabbit	-	-	OECD 405 Acute Eye Irritation/Corrosion
2-phenoxyethanol	Eyes - Moderate irritant	Rabbit	-	6 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Skin : Based on available data, the classification criteria are met.

Eyes : Based on available data, the classification criteria are met.

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

Sensitization

Skin : Based on available data, the classification criteria are met.

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



Potential chronic health effects

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Eye contact** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.

Chronic toxicity

Carcinogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Mutagenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Teratogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Reproductive toxicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity

Name	Category	Route of exposure	Target organs
N,N'-methylenebismorpholine	Category B	Oral Skin Inhalation	gastrointestinal tract and respiratory tract gastrointestinal tract and respiratory tract gastrointestinal tract and respiratory tract
Tall oil, compd. with diethanolamine	Category B	Oral Skin Inhalation	Not determined Not determined Not determined

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

- Ecotoxicity** : This material is harmful to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity



Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated heavy paraffinic	Acute LL50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute LL50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Chronic NOEL 10 mg/l	Crustaceans - Daphnia magna	21 days	-
	Chronic NOEL >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
N,N-bis(2-hydroxyethyl) oleamide	Acute EC50 18.6 mg/l	Algae - Scenedesmus subspicatus	72 hours	-
	Acute EC50 3.2 mg/l	Daphnia	48 hours	OECD 202
	Acute LC50 5.1 mg/l	Fish - Danio rerio	96 hours	OECD 203
	Chronic NOEC 0.1 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
Sulfonic acids, petroleum, sodium salts	Acute EC50 >1000 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-
	Acute EC50 2.4 mg/l	Daphnia - Daphnia magna	48 hours	-
Tall oil, potassium salt Tall oil, compd. with diethanolamine	Acute EC50 2.4 mg/l	Daphnia	48 hours	-
	Acute EC50 20 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	201
Distillates (petroleum), hydrotreated heavy naphthenic	Acute EC50 4.1 mg/l	Daphnia - Daphnia mania	48 hours	202
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
2-phenoxyethanol	Chronic NOEC 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Acute EC50 501 mg/l	Algae - Desmodesmus subspicatus	72 hours	-
	Acute EC50 501 mg/l	Daphnia - Daphnia magna	48 hours	-
	Acute EC50 880 mg/l	Micro-organism	17 hours	-
	Acute EC50 32.4 mg/l	Micro-organism	5 minutes	-
	Acute LC50 344 mg/l	Fish	96 hours	-
	Acute LC50 344000 µg/l	Fish - Pimephales promelas	96 hours	-
	Fresh water	Daphnia - Daphnia magna	21 days	OECD 201
Alcohols, C12-14	Acute NOEC 9.43 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute EC50 20.5 mg/l	Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute LC50 0.525 mg/l	Fish	96 hours	QSAR

Persistence/degradability

Product/substance	Test	Result	Dose	Inoculum
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge



Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Not readily
N,N-bis(2-hydroxyethyl) oleamide	-	-	Readily
Sulfonic acids, petroleum, sodium salts	-	-	Not readily
Distillates (petroleum), hydrotreated heavy naphthenic	-	-	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 is generally mobile in the ground. It may contaminate ground water. The product may evaporate. Soluble in water.

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



	New Zealand	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

HSNO Approval Number : HSR002606
HSNO Group Standard : Lubricants Additive Coolant and antifreeze. Subsidiary class
HSNO Classification : 6.3 - SKIN IRRITATION - Category A
8.3 - CORROSIVE TO OCULAR TISSUE - Category A
6.5 - SENSITIZATION - Category B (Skin)
9.1 - AQUATIC ECOTOXICITY - Category C

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 (AIC) : All components are listed or exempted.
Canada inventory (DSL/NDL) : Not determined.
China inventory (IECSC) : Not determined.
Europe inventory (EINECS/ELINCS/NLP) : 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)	: Not determined.
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

History

Date of revision	: 2022/02/25
Date of previous revision	: No previous validation
Version	: 1

Key to abbreviations

: ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
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)
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SGG = Segregation Group
UN = United Nations

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.