AlphaPlus® 1-Octene

Version 1.21 Revision Date 2026-08-03

MSDS number: AA00974-0000000094

Version	Revision Date:	SDS Number (Internal):	Date of last issue: 2025-06-16
1.21	2026-08-03	100000068580	Date of first issue: 2009-10-27

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AlphaPlus® 1-Octene

Material : 1128499, 1117428, 1064097, 1021765, 1015426, 1037082
Product code : 000000000000000000 000000000000000000

Recommended use of the chemical and restrictions on use

Recommended use : Commercial Product
Restrictions on use : None known.

Manufacturer or supplier's details

Address : Chevron Phillips Chemical Company LP
Normal Alpha Olefins (NAO)
9500 Lakeside Blvd.
The Woodlands, TX 77381

Address : CHEVRON PHILLIPS CHEMICALS ASIA PTE. LTD.
C/O DONG WOO CORPORATION
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Telephone no.: +612-9186-1132

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
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EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
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Belgium: 070 245 245 (24 hours/day, 7 days/week)
Bulgaria: +359 2 9154 233
Croatia: +3851 2348 342 (24 hours/day, 7 days/week)
Cyprus: 1401
Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402
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Iceland: 543 2222 (24 hours/day, 7 days/week)
Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726;POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;
Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)
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Portugal: CIAV phone number: +351 800 250 250
Romania: +40213183606
Slovakia: +421 2 5477 4166
Slovenia: Phone number: 112
Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)
Sweden: 112 – ask for Poisons Information

Organization that prepared the SDS	:	Product Safety and Toxicology Group
E-mail address	:	SDS@CPChem.com
Website	:	www.CPChem.com
Appointees	:	회사명: 리이치 24 시코리아㈜. 주소: 서울시 서초구 헌릉로 7, 외국기업창업지원연구센터 (IKP) 908-909호 전화: +82-1067838981

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	:	Category 2
Aspiration hazard	:	Category 1
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements :
H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P331 Do NOT induce vomiting.
P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.
P391 Collect spillage.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container according to waste-related laws

Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	Common Name	CAS-No.	Concentration (% w/w)
1-Octene	oct-1-ene	111-66-0	>= 95 - <= 100
2-Ethyl-1-Hexene	2-ethylhex-1-ene	1632-16-2	>= 1 - < 2.5

None

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.
Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed	:	No information available. No information available.
Notes to physician	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media

Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling	:	Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient. Review all operations, which have the potential to generating and accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106 "Flammable and Combustible Liquids"; National Fire Protection Association (NFPA 77), "Recommended Practice on Static Electricity"; and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and stray Currents". Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Further information on stor-	:	No decomposition if stored and applied as directed.

age stability

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.
Contains no substances with occupational exposure limit values.

Engineering measures : Adequate ventilation to control airborned concentrations below the exposure guidelines/limits.
Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment. Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

Respiratory protection : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate.
If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as:
Air-Purifying Respirator for Organic Vapors
A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical

		breakthrough.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	Clear, colorless
Odor	:	No data available
		No information available.
Odor Threshold	:	No data available
		No data available
pH	:	No data available
Pour point	:	Not applicable
Melting point/freezing point		-102 °C
Boiling point/boiling range	:	121 °C
Flash point	:	13 °C
		Method: Tag closed cup
Evaporation rate	:	No data available
Self-ignition	:	221 °C
Upper explosion limit / Upper flammability limit	:	Upper flammability limit 6.8 %(V)
Lower explosion limit / Lower flammability limit	:	Lower flammability limit 0.7 %(V)
Vapor pressure	:	1.75 kPa (20 °C)

		15.3 kPa (65 °C)
Solubility(ies)		
Water solubility	:	Soluble in hydrocarbon solvents; insoluble in water.
Relative vapor density	:	3.9 (Air = 1.0)
Relative density	:	0.72 (15.6 °C)
		0.723 (10 °C)
		0.715 (20 °C)
		0.690 (50 °C)
		0.686 (55 °C)
Density	:	719 kg/m3 (15 °C)
		710 kg/m3 (20 °C)
		690 kg/m3 (50 °C)
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	0.38 cSt (40 °C)
Oxidizing properties	:	no
Molecular weight	:	112.24 g/mol

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions	:	Reactivity: Stable at normal ambient temperature and pressure. Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Possibility of hazardous reactions: Hazardous polymerization does not occur. Possibility of hazardous reactions: No decomposition if stored and applied as directed.

Possibility of hazardous reactions:
Vapors may form explosive mixture with air.

Conditions to avoid : Heat, sparks, fire, and oxidizing agents.

Incompatible materials : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous decomposition products : Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data available

Health hazard information

Acute toxicity

No data available

Components:

1-Octene:

Acute oral toxicity : LD50 (Rat, male and female): > 10,000 mg/kg
Method: Fixed Dose Method
GLP: yes
Assessment: Not harmful

Acute inhalation toxicity : LC50 (Rat, male): 40.2 mg/l, 8050 ppm
Exposure time: 4 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
GLP: yes
Assessment: 0 - Not toxic

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: Not harmful

Skin corrosion/irritation

Not applicable

Product:

Result : Mild skin irritation

Remarks : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Components:

1-Octene:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	Mild skin irritation
GLP	:	yes

2-Ethyl-1-Hexene:

Result	:	Skin irritation

Serious eye damage/eye irritation

No data available

Product:

Remarks	:	No eye irritation

Components:

1-Octene:

Species	:	Rabbit
Result	:	No eye irritation
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
GLP	:	yes

2-Ethyl-1-Hexene:

Result	:	Eye irritation

Respiratory or skin sensitization

Skin sensitization

Did not cause sensitization on laboratory animals.

Skin sensitization

No data available

Product:

Remarks	:	Did not cause sensitization on laboratory animals.

Components:

1-Octene:

Test Type	:	Maximization Test

Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitization on laboratory animals.
GLP	:	yes

Carcinogenicity

No data available

Components:

1-Octene:

No data available

Carcinogenicity - Assessment	:	Not available

Germ cell mutagenicity

No data available

Components:

1-Octene:

Not applicable

Genotoxicity in vitro	:	Test Type: Ames test Result: negative Test Type: Chromosome aberration test in vitro Result: negative Test Type: Cell transformation assay Result: negative
Genotoxicity in vivo	:	Remarks: Not classified due to data which are conclusive although insufficient for classification.
Germ cell mutagenicity- Assessment	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity

No data available

Components:

1-Octene:

No data available

Reproductive toxicity - Assessment	:	Animal testing did not show any effects on fertility. Not available

STOT-single exposure

No data available

Product:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Components:

2-Ethyl-1-Hexene:

Assessment : May cause drowsiness or dizziness.

STOT-repeated exposure

No data available

Product:

Remarks : Not classified due to data which are conclusive although insufficient for classification.

Repeated dose toxicity

Components:

1-Octene:

Species	:	Rat, Male and female
NOAEL	:	1,000 mg/kg
Application Route	:	Oral diet
Exposure time	:	13 wk
Number of exposures	:	daily
Dose	:	0, 100, 500, 1000 mg/kg
Method	:	OCED Guideline 408
GLP	:	yes
Remarks	:	Information given is based on data obtained from similar substances.

Species	:	Rat, Male and female
NOAEL	:	3000 ppm
Application Route	:	Inhalation
Exposure time	:	13 wk
Number of exposures	:	6 hrs/d, 5 d/wk
Dose	:	0, 300, 1000, 3000 ppm
Method	:	OECD Guideline 413
GLP	:	yes
Remarks	:	Information given is based on data obtained from similar substances.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

May be fatal if swallowed and enters airways.

Components:

1-Octene:

May be fatal if swallowed and enters airways.

2-Ethyl-1-Hexene:

May be fatal if swallowed and enters airways.

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Concentrations substantially above the TLV value may cause narcotic effects.
Solvents may degrease the skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

1-Octene:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.87 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes Remarks: Information given is based on data obtained from similar substances.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes Remarks: Information given is based on data obtained from similar substances.
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (microalgae)): 1 - 10 mg/l Exposure time: 96 h Method: OECD Test Guideline 201 GLP: yes Remarks: Information given is based on data obtained from similar substances.
M-Factor (Acute aquatic toxicity)	:	1

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

2-Ethyl-1-Hexene:

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability	:	Remarks: This material is expected to be readily biodegradable.

Components:

1-Octene:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 67 - 98 %
Exposure time: 28 d
Remarks: This material is expected to be readily biodegradable.
Information given is based on data obtained from similar substances.

Bioaccumulative potential

Components:

1-Octene:

Bioaccumulation : Bioconcentration factor (BCF): 1,259
Method: QSAR modeled data

Mobility in soil

Components:

1-Octene:

Mobility : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : Very toxic to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

Components:

1-Octene:

Results of PBT and vPvB assessment : Non-classified PBT substance
Non-classified vPvB substance

Additional ecological information : Very toxic to aquatic life with long lasting effects.

Endocrine disrupting properties

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

Disposal precautions

Dispose of contents and container according to wastes control act.

14. TRANSPORT INFORMATION

International Regulations

Remarks	:	Octene (all isomers), S.T.2, Cat. Y

IATA-DGR

UN/ID No.	:	UN 3295
Proper shipping name	:	HYDROCARBONS, LIQUID, N.O.S., Hydrocarbons, liquid, n.o.s.
Class	:	3
Packing group	:	II
Labels	:	Class 3 - Flammable Liquid
Packing instruction (cargo aircraft)	:	307
Remarks	:	Octene (all isomers), S.T.2, Cat. Y

IMDG-Code

UN number	:	UN 3295
Proper shipping name	:	HYDROCARBONS, LIQUID, N.O.S. ()
Class	:	3
Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-D
Marine pollutant	:	no
Remarks	:	Octene (all isomers), S.T.2, Cat. Y

Maritime transport in bulk according to IMO instruments

II - Hazardous Properties

Domestic regulation

Refer to section 15 for specific national regulation.

Special precautions for user

Remarks : UN3295

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Harmful Agents to be kept below Occupational Exposure Limits

Not applicable

Harmful Agents Required to be kept below Permission Levels

Not applicable

Hazardous substances requiring management

Not applicable

Special Management Materials

Not applicable

Controlled Substances Subject to Environment Monitoring

Not applicable

Controlled Substances Subject to Health Examination

Not applicable

Hazardous Substances Subject to Process Safety Management (PSM) Reporting Obligation

Chemical name/Classification	Manufacturing or handling quantity	Storage quantity
Flammable liquids	5,000 kg	200,000 kg

K-OSHA Hazardous Substances (Occupational Safety and Health Regulations, Table 1)

Category
Flammable liquid

K-OSHA Hazardous Substances (Occupational Safety and Health Regulations, Table 9)

Category	Manufacturing or handling quantity
Flammable liquid	400 liter

Regulation under the Chemicals Control Act

Toxic Chemicals

Chemical name	CAS-No.	NICS No.	Threshold limits (%)

Restricted Chemicals

Not applicable

Prohibited Chemicals

Not applicable

Toxic Release Inventory

Not applicable

Accident Precaution Chemicals

Not applicable

Chemicals of Acute and Chronic Hazard to Human Health and the Environment

Substances Acutely hazardous to humans

Not applicable

Substances Chronically hazardous to humans

Not applicable

Substances Hazardous to the environment

Not applicable

Accident Precaution Chemicals

Not applicable

Toxic Release Inventory

Not applicable

Act on Registration and Evaluation of Chemical Substances (K-REACH)

Restricted Chemicals

Not applicable

Prohibited Chemicals

Not applicable

Substances with Unconfirmed Hazards

Not applicable

Dangerous Substances Safety Management Act

Classification : Group 4, Flammable liquids, Type 1 petroleums, Water insoluble liquid

Hazard rank : Hazardous rank II

Designated Quantity	:	200 liter
Safety Warning	:	Keep away from fire
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Neither banned nor restricted

Waste Control Act

Industrial general wastes
Follow article 13 of the act to dispose the product waste

Industrial waste
Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

The ingredients of this product are reported in the following inventories:

EU REACH	:	This product is in full compliance according to REACH regulation 1907/2006/EC.
CH INV	:	On the inventory, or in compliance with the inventory
TSCA	:	On or in compliance with the active portion of the TSCA inventory
DSL	:	All components of this product are on the Canadian DSL
AU AIIC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
KECI	:	All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem's notifications or if the Importer of Record themselves notified the substances.
TW TCSI	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

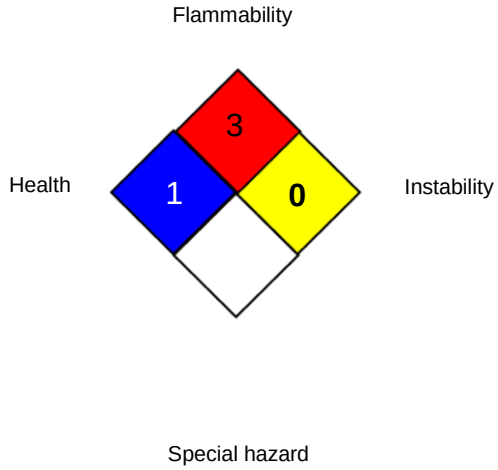
Further information

Issuing date : 2009-10-27

Revision number and date

Number of Revision : 1.21
Revision Date : 2026-08-03
Other information : None.
Date format : yyyy/mm/dd

NFPA:



Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Con-

centration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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