Chemical Safety Data Sheet MSDS / SDS

PROMETON

Revision Date:2023-05-20 Revision Number:1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name	: PROMETON
CBnumber	: CB8308519
CAS	: 1610-18-0
EINECS Number	: 216-548-0
Synonyms	: prometon,Prometone

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

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.
Uses advised against	: none

Company Identification

Company	: Chemicalbook
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone	: 400-158-6606

SECTION 2: Hazards identification

Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Skin irritation, Category 2

Eye irritation, Category 2

Specific target organ toxicity – single exposure, Category 3

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 2

Label elements

Pictogram(s)

Signal word	Warning

Hazard statement(s)

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuerinsing.

Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

Response

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319 Get medical help if you feel unwell.

P391 Collect spillage.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards

no data available

SECTION 3: Composition/information on ingredients

Substance

Product name	: PROMETON
Synonyms	: prometon,Prometone
CAS	: 1610-18-0
EC number	: 216-548-0
MF	: C10H19N5O
MW	: 225.29

SECTION 4: First aid measures

Description of first aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

no data available

Indication of any immediate medical attention and special treatment needed

Basic Treatment: Establish a patent airway (oropharyngeal or nasopharyngeal airway, if needed). Suction if necessary. Encourage patient to take deep breaths. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for pulmonary edema and treat if necessary . Monitor for shock and treat if necessary . Anticipate seizures and treat if necessary . For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with 0.9% saline (NS) during transport . Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool . Irritating materials

SECTION 5: Firefighting measures

Extinguishing media

Extinguish fire using agent suitable for type of surrounding fire. ... Use water in flooding quantities as fog. Use "alcohol foam" ... Wear positive pressure self-contained breathing apparatus when fighting fires involving this material. Triazine pesticide (compounds and preparations), solid (insecticides, agricultural, not elsewhere classified, other than liquid)

Specific Hazards Arising from the Chemical

no data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours.Avoid contacting with skin and eye. Use personal protective equipment.Wear chemical impermeable gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

For minor spills. leaks, etc.. follow all precautions indicated on /the pesticide/ label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-535-5053 (INFOTRAC). day or night. Pramitol 4RR

SECTION 7: Handling and storage

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Do not contaminate water, food. or feed by storage ... Store at temperatures above 32 deg F./Pramitol 4RR/

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Individual protection measures

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Physical state	no data available
Colour	Colorless powder
Odour	no data available
Melting point/freezing point	91 to 92 deg C
Boiling point or initial boiling point and boiling range	359°C at 760mmHg
Flammability	no data available
Lower and upper explosion limit/flammability limit	no data available
Flash point	170.9°C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	READILY SOL IN CHLOROFORM
Partition coefficient n-octanol/water	log Kow = 2.99
Vapour pressure	2.45E-05mmHg at 25°C
Density and/or relative density	1.133g/cm3
Relative vapour density	no data available
Particle characteristics	no data available

SECTION 10: Stability and reactivity

Reactivity

no data available

Chemical stability

Stable to hydrolysis @ 20 deg C in neutral, alkaline or slightly acidic media. ...

Possibility of hazardous reactions

Nonflammable.

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

Decomposed by uv radiation.

SECTION 11: Toxicological information

Acute toxicity

- Oral: LD50 Rat oral 2980 mg/kg Technical
- Inhalation: LC50 Rat inhalation > 3.26 mg/l/4 hr Technical
- Dermal: LD50 Rabbit percutaneous > 2000 mg/kg Technical

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Cancer Classification: Group D Not Classifiable as to Human Carcinogenicity

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

Toxicity

Toxicity to fish: LC50 Salmo gairdneri (Rainbow trout) 20 ppm/96 hr /Technical; conditions of bioassay not specified

Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (Water flea, age <24 hr); Conditions: freshwater, static, 21 deg C; Concentration: 78000 ug/L for 24 hr; Effect: intoxication, immobilization /96-99.9% purity

Toxicity to algae: EC50; Species: Pseudokirchneriella subcapitata (Green algae) Conditions: freshwater, static; Concentration: 98 ug/L for 5 days (95% confidence interval: 88-108 ug/L); Effect: population abundance /97% purity

Toxicity to microorganisms: no data available

Persistence and degradability

AEROBIC: In one investigation, no changes in phytotoxicity were observed in moist, organic soil treated with 17.5 ppm of prometon after 8 wk of incubation; the soil was adjusted to four pHs: 4.3, 5.3, 6.5, and 7.5(1). Several soil bacteria and fungi are reported to attack prometon(2). However, it is not known whether biodegradation is the primary degradation process in soil(2). Methoxy-s-triazines are more resistant to biodegradation than the corresponding methylthio- and chloro-s-triazines(2). Average soil half-life is reported as 932 days(3). In soil, microbial degradation involves hydrolytic cleavage of the methoxy group to give hydroxy metabolites, and dealkylation of the side chains(4). Persistence in soil can be as much as one year, depending upon soil type, moisture, and the application rate(4).

Bioaccumulative potential

An estimated BCF of 19 was calculated in fish for prometon(SRC), using a log Kow of 2.99(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

Mobility in soil

A mean Koc of 524.3 was reported for prometon in 29 soils(1). The Freundlich adsorption constant, K, and exponent, 1/n, for prometon on San Joaquin sandy loam (0.72% organic carbon, 9.7% clay, pH 6.2) at 25 deg C were 2.94 and 0.81, respectively; the corresponding Koc is 408 at a concn of 1 ppm and 305 at a concn of 10.3 ppm(2). Koc values of 572 and 395 were determined in Hanford sandy loam (0.43% organic C, pH 6.05, 7.1% clay, 25.8% silt, 67.1% sand) and Tujunga loamy sand (0.33% organic C, pH 6.3, 4.5% clay, 13.5% silt, 82.0% sand), respectively(3). According to a classification scheme(4), these Koc values suggest that prometon is expected to have low to moderate mobility in soil(SRC). Only 0.1% of prometon applied to a 30.5 cm column and leached under unsaturated flow conditions with 1.2 cm of water/day, was found in leachate at the end of 30 days(5). Prometon was included in mobility class 3, on a scale from 1 (immobile) to 5 (very mobile)(6). Prometon is adsorbed onto soil humic acid, forming stable complexes(7). Ionic, hydrogen bonding, electron donor-acceptor, and covalent forces contribute to the binding. The fact that the basicity of several s-triazines, and hence their tendency to form ionic bonds, is not correlated with adsorptivity indicate that ionic bonding is not the primary factor governing adsorption(7). Data on the free radical content of humic acid adducts, demonstrate that electron donor-acceptor forces are particularly important in the binding of prometon to soil(7). The Freundlich adsorption constant, K, and exponent, 1/n, for prometon on Volcay bentonite at 25 deg C was 150 and 0.64, respectively(8). The mean sorption coefficient (Kd) of 4.86 was given for 59 measured values(9). A pKa of 4.3 at 21 deg C(10) indicates prometon will exist predominately in the unionized form under environmental pHs(SRC). Max adsorption of prometon onto soil organic matter occurred in the pH range 4.2 to 5.2; the addition of HCl or NaOH decreased adsorption(11). Approximately 52% of the prometon adsorbed by organic matter was desorbed with two extractions of 0.1 N NaCl(11).

Other adverse effects

no data available

SECTION 13: Disposal considerations

Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

UN Number

ADR/RID: no data available

IMDG: no data available

IATA: no data available

UN Proper Shipping Name

ADR/RID: no data available

IMDG: no data available

IATA: no data available

Transport hazard class(es)

ADR/RID: no data available

IMDG: no data available

IATA: no data available

Packing group, if applicable

ADR/RID: no data available

IMDG: no data available

IATA: no data available

Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

Special precautions for user

no data available

Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

EC Inventory

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Not Listed.

PICCS

Not Listed.

Vietnam National Chemical Inventory

Listed.

IECSC

Not Listed.

Korea Existing Chemicals List (KECL)

Not Listed.

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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