#### Chemical Book India

# Chemical Safety Data Sheet MSDS / SDS

#### Non-1-ene SDS

Revision Date: 2024-04-25 Revision Number: 1

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

#### Product identifier

Product name: Non-1-ene CAS: 124-11-8

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

Relevant identified For R&D use only. Not for medicinal, household or other use.

uses:

Uses advised none

against:

# Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

Telephone: +91 9550333722

# **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

Flammable liquids, Category 3 Aspiration hazard, Category 1 Skin irritation, Category 2 Eye irritation, Category 2 Specific target organ toxicity - single exposure, Category 3

# GHS label elements, including precautionary statements

Pictogram(s)







Signal word

Danger

#### Hazard statement(s)

H226 Flammable liquid and vapour

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

#### Precautionary statement(s)

#### 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.

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

P264 Wash ... thoroughly after handling.

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

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

#### Response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower]. P370+P378 In case of fire: Use ... to extinguish.

P301+P316 IF SWALLOWED: Get emergency medical help immediately.

P331 Do NOT induce vomiting.

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.

#### Storage

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

P405 Store locked up.

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

#### 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 which do not result in classification

no data available

# **SECTION 3: Composition/information on ingredients**

#### Substance

Chemical name: Non-1-ene
Common names and Non-1-ene

synonyms:

CAS number: 124-11-8
EC number: 204-681-7

Concentration: 100%

# **SECTION 4: First aid measures**

Description of necessary 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/effects, acute and delayed

High vapor concentrations irritate eyes and respiratory tract and act as an anesthetic. (USCG, 1999)

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

no data available

# **SECTION 5: Firefighting measures**

# Suitable extinguishing media

Fire Extinguishing Agents Not to Be Used: Water may be ineffective Fire Extinguishing Agents: Foam, carbon dioxide, or dry chemical (USCG, 1999)

# Specific hazards arising from the chemical

Excerpt from ERG Guide 128 [Flammable Liquids (Water-Immiscible)]: HIGHLY FLAWWABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Those substances designated with a (P) may polymerize explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. Substance may be transported hot. For hybrid vehicles, ERG Guide 147 (lithium ion batteries) or ERG Guide 138 (sodium batteries) should also be consulted. If molten aluminum is involved, refer to ERG Guide 169. (ERG, 2016)

#### Special protective actions for fire-fighters

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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# **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

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# SECTION 8: Exposure controls/personal protection

#### Control parameters

# Occupational Exposure limit values

no data available

# Biological limit values

no data available

# Appropriate engineering 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, such as personal protective equipment (PPE)

# 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 and safety characteristics

Physical state: 1-nonene is a colorless liquid with an odor of gasoline. Flash point 115°F. Floats on water.

Flammable, irritating vapor is produced.

Colorless liquid

Odour: Strong, grassy, onion, rancid

Melting 311°C(lit.) point/freezing

point:

147°C Boiling point or

initial boiling point and boiling range:

Flammability: no data available

Lower and upper

no data available

explosion

limit/flammability

limit:

Flash point: 46°C(lit.)

**Auto-ignition** 

no data available

temperature:

Decomposition no data available

temperature:

no data available pH:

Kinematic 0.851 sq mm/sec @ 20 deg C

viscosity:

Solubility: Insol in water, soluble in alcohol

Partition log Kow= 5.15

coefficient noctanol/water:

Vapour pressure: 11 mm Hg ( 37.7 °C)

Density and/or 0.73

relative density:

Relative vapour 4.35 (vs air)

density:

Particle no data available

characteristics:

# **SECTION 10: Stability and reactivity**

# Reactivity

Flammable. Insoluble in water.

# Chemical stability

no data available

# Possibility of hazardous reactions

1-NONENE may react vigorously with strong oxidizing agents. May react exothermically with reducing agents to release hydrogen gas. In the presence of various catalysts (such as acids) or initiators, may undergo exothermic addition polymerization reactions.

#### Conditions to avoid

no data available

# Incompatible materials

no data available

# Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

# Acute toxicity

Oral: no data available

Inhalation: no data available

Dermal: no data available

#### 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

no data available

# 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: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

#### Persistence and degradability

Pentane through n-octane were oxidized with a progressive increase in specific activity, followed by a decrease as the hydrocarbon chain increased up to heptadecane.

# Bioaccumulative potential

An estimated BCF of 1843 was calculated for 1-nonene(SRC), using a log Kow of 5.15(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is very high.

### Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc for 1-nonene can be estimated to be 935(SRC). According to a classification scheme(2), this estimated Koc value suggests that 1-nonene is expected to have low mobility in soil.

#### 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: UN3295 (For reference only, please check.)

IMDG: UN3295 (For reference only, please check.) IATA: UN3295 (For reference only, please check.)

# **UN Proper Shipping Name**

ADR/RID: HYDROCARBONS, LIQUID, N.O.S. (For reference only, please check.) IMDG: HYDROCARBONS, LIQUID, N.O.S. (For reference only, please check.) IATA: HYDROCARBONS, LIQUID, N.O.S. (For reference only, please check.)

# Transport hazard class(es)

ADR/RID: 3 (For reference only, please check.) IMDG: 3 (For reference only, please check.) IATA: 3 (For reference only, please check.)

# Packing group, if applicable

ADR/RID: I (For reference only, please check.)
IMDG: I (For reference only, please check.)
IATA: I (For reference only, please check.)

#### Environmental hazards

ADR/RID: No IMDG: No IATA: No

#### 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 Listed. New Zealand Inventory of Chemicals (NZIoC) Not Listed. (PICCS) Not Listed. Vietnam National Chemical Inventory Listed. IECSC) Listed. Korea Existing Chemicals List (KECL) 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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