



### GERANIOL CAS No 106-24-1

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Geraniol

CAS-No. : 106-24-1

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House Ansari Road Daryaganj New Delhi-110002

INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318 Skin sensitisation (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word

Hazard statement(s)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Danger

H318 Causes serious eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.1 Substances

Synonyms: trans-3,7-Dimethyl-2,6-octadien-1-ol

Formula :  $(CH_3)_2C=CHCH_2CH_2C(CH_3)=CHCH_2OH$ 

Molecular weight : 154.25 g/mol CAS-No. : 106-24-1 EC-No. : 203-377-1

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

**Geraniol** 

CAS-No. 106-24-1 Skin Irrit. 2; Eye Dam. 1; Skin <= 100 %

EC-No. 203-377-1 Sens. 1; H315, H318, H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

#### 6.2 Environmental precautions

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

#### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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.

Storage class (TRGS 510): Combustible liquids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

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

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Form: clear, liquid a) Appearance

Colour: colourless

b) Odour No data available

Odour Threshold No data available

No data available d) рΗ

Melting point/freezing

point

Melting point/freezing point: -14.99 °C

Initial boiling point and f)

boiling range

229 - 230 °C - lit.

Flash point 108 °C - closed cup - Tested according to Annex V of Directive

67/548/EEC.

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available i)

Upper/lower flammability or explosive limits No data available

1 hPa at 70.6 °C k) Vapour pressure Vapour density 5.33 - (Air = 1.0)

m) Relative density 0.879 g/cm3 at 20 °C n) Water solubility No data available log Pow: 2.5 at 25 °C o) Partition coefficient: n-

octanol/water

p) Auto-ignition No data available

temperature

Decomposition No data available

temperature

Viscosity No data available r) Explosive properties No data available No data available t) Oxidizing properties

#### 9.2 Other safety information

Relative vapour density 5.33 - (Air = 1.0)

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents, Acid chlorides, Acid anhydrides

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 3,600 mg/kg(Geraniol)

Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Coma. Skin and Appendages:

Other: Hair

LD50 Dermal - Rabbit - > 5,000 mg/kg(Geraniol)

#### Skin corrosion/irritation

Skin - Rabbit(Geraniol)

Result: Irritating to skin. - 24 h

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit(Geraniol)

Result: Risk of serious damage to eyes. - 24 h

(Directive 67/548/EEC, Annex V, B.5.)

#### Respiratory or skin sensitisation

- Guinea pig(Geraniol)

May cause sensitisation by skin contact.

#### Germ cell mutagenicity

No data available(Geraniol)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Geraniol)

#### Specific target organ toxicity - single exposure

No data available(Geraniol)

#### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available(Geraniol)

#### **Additional Information**

RTECS: RG5830000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache(Geraniol)

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - ca. 22 mg/l - 96 h(Geraniol)

(OECD Test Guideline 203)

Toxicity to daphnia and

Immobilization EC50 - Daphnia magna (Water flea) - 10.8 mg/l - 48 H

other aquatic invertebrates

(Geraniol) (OECD Test Guideline 202)

Toxicity to algae

Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 13.1 mg/l

- 72 h(Geraniol)

#### 12.2 Persistence and degradability

Biodegradability aerobic Chemical oxygen demand - Exposure time 3 d(Geraniol)

Result: 80 - 100 % - Readily biodegradable

(OECD Test Guideline 301A)

#### 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available(Geraniol)

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Harmful to aquatic life.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

#### **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

# **Safety**, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.