# Material Safety Data Sheet
# Eugenol

## SECTION 1.1 – PRODUCT IDENTIFICATION

| | | |
|---|---|---|
| **Product Name** | : | Eugenol |
| **Molecular Formula** | : | $C_{10}H_{12}O_2$ |
| **Molecular Weight** | : | 164.20 g/mole |
| **CAS No.** | : | 97-53-0 |

## SECTION: 1.2 – COMPANY IDENTIFICATION

**Company Name: Indenta Chemicals (India) Pvt. Ltd.**
**Address:** 117, The Summit Business Bay, Opp Cinemax, Off. Sir M.V. Road, Near WEH Metro Station, Andheri (E), Mumbai 400 093, India
**Telephone #:**+91-22-26849600
**Fax #:**+91-22-26849060

## SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

| Name | CAS# | % by Weight |
|---|---|---|
| Eugenol | 97-53-0 | 100 |

## SECTION 3: HAZARD IDENTIFICATION

**2.1 Classification of the substance or mixture**
**Classification according to Regulation (EC) No 1272/2008**
Eye irritation (Category 2), H319
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 Warning
**Hazard statement(s)**
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
**Precautionary statement(s)**
P280 Wear protective gloves.
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** – none

## 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 3.2) and/or in section 11

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

No data available

## SECTION 5: FIRE AND EXPLOSION DATA

**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.

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 3.2.
**7.2 Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

**8.1 Control parameters**
**Components with workplace 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**
Face shield and safety glasses 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.
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
**Full contact**
Material: Nitrile rubber
Minimum layer thickness: 0,4 mm
Break through time: 480 min
Material tested:Camatril®
**Splash contact**
Material: Nitrile rubber
Minimum layer thickness: 0,2 mm
Break through time: 49 min
Material tested:Dermatril® P

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**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 a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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**

| | |
|---|---|
| **a) Appearance** | Form: clear, liquid<br>Colour: light yellow |
| **b) Odour** | No data available |
| **c) Odour Threshold** | No data available |
| **d) pH** | No data available |
| **e) Melting point/freezing point** | |
| **Melting point/range:** | -12 - -10 °C |
| **f) Initial boiling point and boiling range** | 253 °C at 1013 hPa |
| **g) Flash point** | 112 °C - closed cup |
| **h) Evaporation rate** | No data available |
| **i) Flammability (solid, gas)** | No data available |
| **j) Upper/lower flammability or explosive limits** | No data available |
| **k) Vapour pressure** | < 0,1 hPa at 25 °C |
| **l) Vapour density** | No data available |
| **m) Relative density** | 1,066 g/cm3 |
| **n) Water solubility** | No data available |
| **o) Partition coefficient: n-octanol/water** | log Pow: 2,7 |

| | |
|---|---|
| **p) Auto-ignition temperature** | No data available |
| **q) Decomposition temperature** | No data available |
| **r) Viscosity** | No data available |
| **s) Explosive properties** | No data available |
| **t) Oxidizing properties** | No data available |

**9.2 Other safety information**
No data available

## 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**
Air
**10.5 Incompatible materials**
Strong oxidizing agents
**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 - > 2.000 mg/kg
(OECD Test Guideline 423)
**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)
**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Irritating to eyes.
(OECD Test Guideline 405)
**Respiratory or skin sensitisation**
in vivo assay - Mouse
May cause allergic skin reaction.
(OECD Test Guideline 429)
**Germ cell mutagenicity**
Rat

Liver
DNA damage
Mouse
lymphocyte
Mutation in mammalian somatic cells.
Hamster
Embryo
Unscheduled DNA synthesis
Hamster
Embryo
Morphological transformation.
Hamster
Embryo
Sister chromatid exchange
Mouse
Micronucleus test

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Eugenol)
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

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: SJ4375000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity**

Toxicity to fish LC50 - Danio rerio (zebra fish) - 13 mg/l - 96 h
(OECD Test Guideline 203)
Toxicity to daphnia
and other aquatic
invertebrates
EC50 - Daphnia (water flea) - 1,13 mg/l - 48 h

**12.2 Persistence and degradability**

Biodegradability Result: - Readily biodegradable.
(Directive 67/548/EEC Annex V, C.4.E.)

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

Toxic to aquatic life.

No data available

## SECTION 13: DISPOSAL CONSIDERATION

**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: OTHER REGULATORY INFORMATION

**15.1 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: ADDITIONAL INFORMATION

This information is provided for documentation purposes only.
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