CAS-No.: 93-89-0 MSDS

LABOGEN'S

MATERIAL SAFETY DATA SHEET (MSDS)

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

| : Substance |
|-------------|
| : |
| : 93-89-0 |
| : 3719H |
| : C9H10O2 |
| CH3 |
| |

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

1.2.1. Relevant identified uses

Industrial/Professional use spec

: Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar , Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com______

1.4. Emergency telephone number

Emergency number

: +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Xi; R36 Xi; R37 Xi; R38 Full text of R-phrases: see section 16 www.Labogens.com Safety Data Sheet

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other hazards

No additional information available

| SECTION 3: Composition/information on ingredients | | | |
|---|------------|--------------------------------|--|
| 3.1. | Substances | | |
| Name | | : ETHYL BENZOATE FOR SYNTHESIS | |
| CAS-No |). | : 93-89-0 | |

Full text of R- and H-statements: see section 16

3.2. Mixtures Not applicable

| SECTION 4: First aid measures | | | |
|-------------------------------|----------------------------------|---------|--|
| | | | |
| 4.1. | Description of first aid measure | 5 | |
| First-aid | measures after inhalation | | emove person to fresh air and keep comfortable for breathing. Call a POISON ENTER/doctor if you feel unwell. |
| First-aid | d measures after skin contact | : Wa | ash with plenty of water/ Wash contaminated clothing before reuse. |
| First-aid | l measures after eye contact | | nse cautiously with water for several minutes. Remove contact lenses, if present d easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid | measures after ingestion | : Rir | nse mouth. Do not induce vomiting. |
| 4.2. | Most important symptoms and | ffects | s, both acute and delayed |
| No addi | tional information available | | |
| 4.3. | Indication of any immediate me | dical a | attention and special treatment needed |

Treat symptomatically.

| SECTION 5: Firefighting measures | | | | |
|----------------------------------|--|--|--|--|
| 5.1. Extinguishing media | | | | |
| Suitable extinguishing media | : Water spray. Foam. Dry powder. Carbon dioxide. | | | |
| Unsuitable extinguishing media | : Do not use a heavy water stream. | | | |
| | | | | |

5.2. Special hazards arising from the substance or mixture

No additional information available

Safety Data Sheet

| 5.3. Advice for firefighters | |
|--|---|
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. |
| SECTION 6: Accidental release measures | S |
| 6.4 Descend processions, protective | a cruit ment and a marganey presedures |
| | e equipment and emergency procedures |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Evacuate unnecessary personnel. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area. |
| 6.2. Environmental precautions | |
| Avoid release to the environment. | |
| 6.3. Methods and material for contai | nment and cleaning up |
| Methods for cleaning up | : Collect spillage. On land, sweep or shovel into suitable containers. |
| Methods for cleaning up | |
| 6.4. Reference to other sections | |
| No additional information available | |
| SECTION 7: Handling and storage | |
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Do not breathe vapours. Avoid contact with skin and eyes. |
| Hygiene measures | Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| | |
| 7.2. Conditions for safe storage, incl | |
| Storage conditions | : Keep container tightly closed. Store in a well-ventilated place. Keep cool. |
| 7.3. Specific end use(s) | |
| No additional information available | |
| SECTION 8: Exposure controls/personal | protection |
| 8.1. Control parameters | |
| No additional information available | |

| 8.2. Exposure controls | | |
|---|--|--|
| Hand protection | : Protective gloves | |
| Eye protection | : Chemical goggles or safety glasses | |
| Skin and body protection | : Wear suitable protective clothing | |
| Respiratory protection | : [In case of inadequate ventilation] wear respiratory protection. | |
| SECTION 9: Physical and chemical properties | | |
| 9.1. Information on basic physical ar | nd chemical properties | |
| Physical state | : Liquid | |
| Molecular mass | : 150.18 g/mol | |

Safety Data Sheet

| Colour | : Clear Colorless. |
|--|-----------------------------|
| Odour | : No data available |
| Odour threshold | : 0.6 ppm |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : -34 °C |
| Freezing point | : No data available |
| Boiling point | : 212 °C |
| Flash point | : 93.4 °C |
| Auto-ignition temperature | : 490 °C |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : 1 mm Hg at 44 °C |
| Relative vapour density at 20 °C | : 5.18 |
| Relative density | : No data available |
| Density | : 1.045 g/cm³ at 25 °C |
| Solubility | : Water: Insoluble in water |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |
| 9.2. Other information | |
| No additional information available | |
| SECTION 10: Stability and reactivity | |

| 10.1. | Reactivity |
|----------|------------------------------------|
| No add | itional information available |
| | |
| 10.2. | Chemical stability |
| Stable | under normal conditions. |
| | |
| 10.3. | Possibility of hazardous reactions |
| No add | itional information available |
| | |
| 10.4. | Conditions to avoid |
| Direct s | sunlight. Open flame. Overheating. |
| | |
| 10.5. | Incompatible materials |

No additional information available

Safety Data Sheet

10.6. Hazardous decomposition products

No additional information available

| SECTION 11: Toxicological informati | on |
|--|------------------|
| | |
| 11.1. Information on toxicological | effects |
| Acute toxicity | : Not classified |
| | |
| | |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| | |
| Reproductive toxicity | : Not classified |
| , , | |
| STOT-single exposure | : Not classified |
| | |
| STOT-repeated exposure | : Not classified |
| | |
| | |
| Aspiration hazard | : Not classified |

| ECTION 12: Ecological information | |
|------------------------------------|--|
| | |
| 2.1. Toxicity | |
| o additional information available | |
| | |
| | |
| | |
| 2.2. Persistence and degradability | |
| o additional information available | |
| | |
| 2.3. Bioaccumulative potential | |
| o additional information available | |
| | |
| 2.4. Mobility in soil | |

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

Safety Data Sheet

SECTION 13: Disposal considerations 13.1. Waste treatment methods No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| 14.1. UN number | |
|-----------------------------------|--|
| UN-No. (ADR) | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |
| UN-No. (ADN) | : Not applicable |
| UN-No. (RID) | : Not applicable |
| | |
| 14.2. UN proper shipping name | · Natanaliashia |
| Proper Shipping Name (ADR) | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |
| Proper Shipping Name (ADN) | : Not applicable |
| Proper Shipping Name (RID) | : Not applicable |
| 14.3. Transport hazard class(es) | |
| ADR | |
| Transport hazard class(es) (ADR) | : Not applicable |
| | |
| IMDG | |
| Transport hazard class(es) (IMDG) | : Not applicable |
| | |
| ΙΑΤΑ | |
| Transport hazard class(es) (IATA) | : Not applicable |
| | |
| ADN | |
| Transport hazard class(es) (ADN) | : Not applicable |
| | |
| RID | |
| Transport hazard class(es) (RID) | : Not applicable |
| | |
| 14.4. Packing group | |
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| Packing group (ADN) | : Not applicable |
| Packing group (RID) | : Not applicable |
| | |
| 14.5. Environmental hazards | · No |
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |

Safety Data Sheet

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea No data available

- Air transport No data available

- Inland waterway transport No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

ETHYL BENZOATE FOR SYNTHESIS is not on the REACH Candidate List ETHYL BENZOATE FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

| Immission Control Act - 12.BImSchV | |
|---|---|
| 12th Ordinance Implementing the Federal | : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) |
| Reference to AwSV | : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV; ID No. 2346) |

| : The substance is not listed |
|-------------------------------|
| : The substance is not listed |
| |

Denmark

| Class for fire hazard | : | Class III-1 |
|-----------------------|---|-------------|
| Store unit | : | 50 liter |

Safety Data Sheet

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

 15.2.
 Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

| R36 | Irritating to eyes |
|-----|----------------------------------|
| R37 | Irritating to respiratory system |
| R38 | Irritating to skin |
| Xi | Irritant |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product