# MATERIAL SAFETY DATA SHEET (MSDS)

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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>: Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>: 03661</td>
</tr>
</tbody>
</table>

### 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

LOBA CHEMIE PVT. LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai - INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
info@lobachemie.com - www.lobachemie.com

### 1.4. Emergency telephone number

| Emergency number | : +91 22 6663 6663 (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]

<table>
<thead>
<tr>
<th>Flammable liquids, Category 2</th>
<th>H225</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral), Category 4</td>
<td>H302</td>
</tr>
<tr>
<td>Specific target organ toxicity — Single exposure, Category 2</td>
<td>H371</td>
</tr>
</tbody>
</table>

Full text of H statements: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available
2.2. Label elements

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

Hazard pictograms (CLP):

- GHS02
- GHS07
- GHS08

Signal word (CLP): Danger

Hazard statements (CLP):
- H225 - Highly flammable liquid and vapour.
- H302 - Harmful if swallowed.
- H371 - May cause damage to organs.

Precautionary statements (CLP):
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P260 - Do not breathe vapours, spray, dust, fume, gas.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5</td>
<td>75 - 99</td>
<td>Flam. Liq. 3, H226 Skin Corr. 1A, H314</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5 (EC-No.) 231-791-2</td>
<td>15 - 25</td>
<td>Not classified</td>
</tr>
<tr>
<td>EOSINE YELLOW C.I.No.45380</td>
<td>(CAS-No.) 17372-87-1</td>
<td>1 - 5</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>(CAS-No.) 64-19-7 (EC-No.) 200-580-7 (EC Index-No.) 607-002-00-6</td>
<td>0.01 - 1</td>
<td>Skin Corr. 1A, H314 Eye Dam. 1, H318 Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>(CAS-No.) 50-00-0 (EC-No.) 200-001-8 (EC Index-No.) 605-001-00-5</td>
<td>0.01 - 1</td>
<td>Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Eye Dam. 1, H318 Carc. 2, H351 STOT SE 3, H335 Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact: Wash with plenty of water/…. Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects: Causes severe skin burns and eye damage.

Symptoms/effects after inhalation: May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour.

Explosion hazard: May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

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 containment and cleaning up

Methods for cleaning up: Collect spillage. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling: Do not breathe vapours. Use only non-sparking tools. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking.

Hygiene measures: Do not eat, drink or smoke when using this product. 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, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Comply with applicable regulations.

Storage conditions: Keep in fireproof place. Keep container tightly closed.

Incompatible materials: Heat sources.

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 face shield

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 and chemical properties

Physical state: Liquid

Colour: Orange.

Odour: No data available

Odour threshold: No data available

pH: No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point: No data available

Freezing point: No data available

Boiling point: No data available

Flash point: 14 °C
**EOSIN STAINING (2% w/v) ALCOHOLIC SOLUTION**

**Safety Data Sheet**

- **Auto-ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Flammability (solid, gas)**: Highly flammable liquid and vapour.
- **Vapour pressure**: No data available
- **Relative vapour density at 20 °C**: No data available
- **Relative density**: No data available
- **Solubility**: No data available
- **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**
Thermal decomposition generates: Corrosive vapours.

10.2. **Chemical stability**
Stable under normal conditions.

10.3. **Possibility of hazardous reactions**
No additional information available

10.4. **Conditions to avoid**
Open flame. Heat. Sparks.

10.5. **Incompatible materials**
No additional information available

10.6. **Hazardous decomposition products**
May release flammable gases. Thermal decomposition generates: Corrosive vapours.

**SECTION 11: Toxicological information**

11.1. **Information on toxicological effects**

Acute toxicity: Oral: Harmful if swallowed.

- **ATE CLP (oral)**: 500 mg/kg bodyweight
- **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: May cause damage to organs.

STOT-repeated exposure: Not classified
Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. 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

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information: Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

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

14.1. UN number
UN-No. (ADR) : 1170
UN-No. (IMDG) : 1170
UN-No. (IATA) : 1170
UN-No. (ADN) : 1170
**EOSIN STAINING (2% w/v) ALCOHOLIC SOLUTION**

**Safety Data Sheet**

<table>
<thead>
<tr>
<th><strong>UN-No. (RID)</strong></th>
<th>: 1170</th>
</tr>
</thead>
</table>

### 14.2. UN proper shipping name

| Proper Shipping Name (ADR) | ETHANOL (ETHYL ALCOHOL) / ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| Proper Shipping Name (IMDG) | ETHANOL (ETHYL ALCOHOL) |
| Proper Shipping Name (IATA) | Ethanol |
| Proper Shipping Name (ADN) | ETHANOL (ETHYL ALCOHOL) |
| Proper Shipping Name (RID) | ETHANOL (ETHYL ALCOHOL) |

| Transport document description (ADR) | UN 1170 ETHANOL (ETHYL ALCOHOL) / ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E) |
| Transport document description (IMDG) | UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II |
| Transport document description (IATA) | UN 1170 Ethanol, 3, II |
| Transport document description (ADN) | UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II |
| Transport document description (RID) | UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II |

### 14.3. Transport hazard class(es)

#### ADR

| Transport hazard class(es) (ADR) | : 3 |
| Danger labels (ADR) | : 3 |

#### IMDG

| Transport hazard class(es) (IMDG) | : 3 |
| Danger labels (IMDG) | : 3 |

#### IATA

| Transport hazard class(es) (IATA) | : 3 |
| Hazard labels (IATA) | : 3 |

#### ADN

| Transport hazard class(es) (ADN) | : 3 |
| Danger labels (ADN) | : 3 |

#### RID
EOSIN STAINING (2% w/v) ALCOHOLIC SOLUTION
Safety Data Sheet

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3

14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
  Classification code (ADR) : F1
  Special provisions (ADR) : 144, 601
  Limited quantities (ADR) : 1l
  Excepted quantities (ADR) : E2
  Packing instructions (ADR) : P001, IBC02, R001
  Mixed packing provisions (ADR) : MP19
  Portable tank and bulk container instructions (ADR) : T4
  Portable tank and bulk container special provisions (ADR) : TP1
  Tank code (ADR) : LGBF
  Vehicle for tank carriage : FL
  Transport category (ADR) : 2
  Special provisions for carriage - Operation (ADR) : S2, S20
  Hazard identification number (Kemler No.) : 33
  Orange plates

  Tunnel restriction code (ADR) : D/E
  EAC code : •2YE

- Transport by sea
  Special provisions (IMDG) : 144
  Limited quantities (IMDG) : 1 L
  Excepted quantities (IMDG) : E2
  Packing instructions (IMDG) : P001
  IBC packing instructions (IMDG) : IBC02
  Tank instructions (IMDG) : T4
  Tank special provisions (IMDG) : TP1
  EmS-No. (Fire) : F-E
EOSIN STAINING (2% w/v) ALCOHOLIC SOLUTION
Safety Data Sheet

EmS-No. (Spillage) : S-D
Stowage category (IMDG) : A
Properties and observations (IMDG) : Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.
MFAG-No : 127

- Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3, A58, A180
ERG code (IATA) : 3L

- Inland waterway transport
Classification code (ADN) : F1
Special provisions (ADN) : 144, 601
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

- Rail transport
Classification code (RID) : F1
Special provisions (RID) : 144, 601
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

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

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
15.1.2. National regulations

Germany
Reference to AwSV: Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV, Annex 1)

Netherlands
SZW-lijst van kankerverwekkende stoffen: Ethanol, Formaldehyde are listed
SZW-lijst van mutagene stoffen: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: Ethanol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: Ethanol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: Ethanol is listed

Denmark
Class for fire hazard: Class I-1
Store unit: 1 liter
Classification remarks: F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product. Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Dermal)</td>
<td>Acute toxicity (dermal), Category 2</td>
</tr>
<tr>
<td>Acute Tox. 3 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral), Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids, Category 2</td>
</tr>
</tbody>
</table>
**EOSIN STAINING (2% w/v) ALCOHOLIC SOLUTION**  
Safety Data Sheet

<table>
<thead>
<tr>
<th>Flam. Liq. 3</th>
<th>Flammable liquids, Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1B</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitisation, Category 1</td>
</tr>
<tr>
<td>STOT SE 2</td>
<td>Specific target organ toxicity — Single exposure, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H310</td>
<td>Fatal in contact with skin.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer.</td>
</tr>
<tr>
<td>H371</td>
<td>May cause damage to organs.</td>
</tr>
</tbody>
</table>

*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*