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

1.1. Product identifier
Product form : Mixture
Product code : 02558

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

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 Directive 67/548/EEC or 1999/45/EC
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements
Labelling according to Directive 67/548/EEC or 1999/45/EC
No labelling applicable
2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Directive 67/548/EEC</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>59 - 60</td>
<td>C; R35 R10</td>
<td>Flam. Liq. 3, H226 Skin Corr. 1A, H314</td>
</tr>
<tr>
<td>CHLOROFORM</td>
<td>(CAS No) 67-66-3 (EC no) 200-663-8 (EC index no) 602-006-00-4</td>
<td>29 - 30</td>
<td>Carc.Cat.3; R40 Xn; R22 Xn; R48/20/22 Xi; R38</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 Repr. 2, H361d STOT RE 1, H372</td>
</tr>
<tr>
<td>ACETIC ACID GLACIAL AR</td>
<td>(CAS No) 64-19-7 (EC no) 200-580-7 (EC index no) 607-002-00-6</td>
<td>9 - 11</td>
<td>C; R35 R10</td>
<td>Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

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

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. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Take off contaminated clothing. Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries: Causes damage to organs through prolonged or repeated exposure. May cause damage to organs.

Symptoms/injuries after inhalation: Harmful if inhaled. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact: Harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye damage.

Symptoms/injuries after ingestion: Harmful if swallowed. May be fatal if swallowed and enters airways.

Chronic symptoms: Suspected of damaging the unborn child.
### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
- 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**: Heating may cause an explosion.
- **Hazardous decomposition products in case of fire**: Carbon dioxide. Carbon monoxide. Toxic fumes may be released.

#### 5.3. Advice for firefighters

- **Protection during firefighting**: Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

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

**6.1.1. For non-emergency personnel**

- **Emergency procedures**: Do not breathe gas. Do not breathe vapours. Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

- **Protective equipment**: Use personal protective equipment as required.
- **Emergency procedures**: Stop release.

#### 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. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 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**: Avoid contact with skin, eyes and clothing.
- **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, including any incompatibilities

- **Storage conditions**: Store in original container. Keep container tightly closed. Store in a dry place. Store in a well-ventilated place.

#### 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**: Wear appropriate mask

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>-65 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>61 - 118 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>24 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidising properties</td>
<td>No data available</td>
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<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**9.2. Other information**

No additional information available
SECTION 10: Stability and reactivity

10.1. Reactivity
Highly flammable liquid and vapour.

10.2. Chemical stability
Stable under normal conditions. Combustible liquid.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
<td>Not classified</td>
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</table>

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
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</thead>
<tbody>
<tr>
<td>ACETIC ACID GLACIAL AR (64-19-7)</td>
<td>Not established.</td>
</tr>
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</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLOROFORM (67-66-3)</td>
<td>1.97</td>
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</table>
CARNOY’S SOLUTION (FIXATIVE)
Safety Data Sheet

<table>
<thead>
<tr>
<th>ACETIC ACID GLACIAL AR (64-19-7)</th>
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</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

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
No additional information available

SECTION 14: Transport information

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

14.1. UN number
UN-No. (ADR) : 1992
UN-No. (IMDG) : 1992
UN-No.(IATA) : 1992
UN-No.(ADN) : 1992
UN-No. (RID) : 1992

14.2. UN proper shipping name
Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (RID) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II, (D/E)
Transport document description (IMDG) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II
Transport document description (IATA) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II
Transport document description (ADN) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II
Transport document description (RID) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : 3 (6.1)
Danger labels (ADR) : 3, 6.1

IMDG
Transport hazard class(es) (IMDG) : 3 (6.1)
### CARNOY’S SOLUTION (FIXATIVE)

**Safety Data Sheet**

<table>
<thead>
<tr>
<th>Danger labels (IMDG)</th>
<th>: 3, 6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
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</tr>
</tbody>
</table>

**IATA**

- **Transport hazard class(es) (IATA)** : 3 (6.1)
- **Hazard labels (IATA)** : 3, 6.1
- ![Image](image2.png)

**ADN**

- **Transport hazard class(es) (ADN)** : 3 (6.1)
- **Danger labels (ADN)** : 3, 6.1
- ![Image](image3.png)

**RID**

- **Transport hazard class(es) (RID)** : 3 (6.1)
- **Danger labels (RID)** : 3, 6.1
- ![Image](image4.png)

### 14.4. Packing group

<table>
<thead>
<tr>
<th>Packing group (ADR)</th>
<th>: II</th>
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</thead>
<tbody>
<tr>
<td>Packing group (IMDG)</td>
<td>: II</td>
</tr>
<tr>
<td>Packing group (IATA)</td>
<td>: II</td>
</tr>
<tr>
<td>Packing group (ADN)</td>
<td>: II</td>
</tr>
<tr>
<td>Packing group (RID)</td>
<td>: II</td>
</tr>
</tbody>
</table>

### 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)** : FT1
  - **Special provision (ADR)** : 274
  - **Limited quantities (ADR)** : 1L
  - **Excepted quantities (ADR)** : E2
CARNOY’S SOLUTION (FIXATIVE)
Safety Data Sheet

Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : L4BH
Tank special provisions (ADR) : TU15
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
Special provisions for carriage - Operation (ADR) : S2, S22
Hazard identification number (Kemler No.) : 336
Orange plates : 1992

Tunnel restriction code (ADR) : D/E
EAC code : •3WE
APP code : A(fl)

- Transport by sea

Special provision (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2, TP13
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 352
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A3
ERG code (IATA) : 3HP

- Inland waterway transport

Classification code (ADN) : FT1
Special provisions (ADN) : 274, 802
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP, EX, TOX, A
Ventilation (ADN) : VE01, VE02
CARNOY’S SOLUTION (FIXATIVE)
Safety Data Sheet

- Rail transport
  Number of blue cones/lights (ADN) : 2

  Classification code (RID) : FT1
  Special provision (RID) : 274
  Limited quantities (RID) : 1L
  Excepted quantities (RID) : E2
  Packing instructions (RID) : P001, IBC02
  Mixed packing provisions (RID) : MP19
  Portable tank and bulk container instructions (RID) : T7
  Portable tank and bulk container special provisions (RID) : TP2
  Tank codes for RID tanks (RID) : L4BH
  Special provisions for RID tanks (RID) : TU15
  Transport category (RID) : 2
  Special provisions for carriage – Loading and unloading (RID) : CW13, CW28
  Colis express (express parcels) (RID) : CE7
  Hazard identification number (RID) : 336

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 substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany
AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark
Class for fire hazard : Class II-1
Store unit : 5 liter
Classification remarks : R10 <H225;H302+H312+H332;H304;H315;H318;H336;H361d;H370;H373>;
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
- The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Inhalation)</th>
<th>Acute toxicity (inhal.), Category 3</th>
</tr>
</thead>
<tbody>
<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. 3</td>
<td>Flammable liquids, Category 3</td>
</tr>
<tr>
<td>Repr. 2</td>
<td>Reproductive toxicity, Category 2</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</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>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H361d</td>
<td>Suspected of damaging the unborn child</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>R10</td>
<td>Flammable</td>
</tr>
<tr>
<td>R22</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>R35</td>
<td>Causes severe burns</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin</td>
</tr>
<tr>
<td>R40</td>
<td>Limited evidence of a carcinogenic effect</td>
</tr>
<tr>
<td>R48/20/22</td>
<td>Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed</td>
</tr>
<tr>
<td>X</td>
<td>Corrosive</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</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.