1. Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers
Product Code    AS032
Product Name    Benzene, Hi-AR™

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses    Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
Produced by        HiMedia Laboratories Pvt. Ltd.
Address            23, Vadhani Indl. Estate, LBS Marg, Mumbai 400 086, India.
Tel. No.           +91-22-2500 0970, +91-22-2500 1607
Fax No.            +91-22-2500 2468

1.4 Emergency Tel. No.
Emergency Tel. No.  Please contact the regional HiMedia representation in your country

2. Hazards Identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Flammable liquids (Category 2)
Aspiration hazard (Category 1)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2A)
Germ cell mutagenicity (Category 1A, 1B)
Carcinogenicity (Category 1A, 1B)
Specific target organ toxicity, repeated exposure (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
May cause cancer.
May cause heritable genetic damage.
Highly flammable.
Irritating to eyes and skin.
Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
Harmful: may cause lung damage if swallowed.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Hazard Statement(s)
H225    Highly Flammable liquid and vapour
H304    May be fatal if swallowed and enters airways
H315    Causes skin irritation
H319    Causes serious eye irritation
H340    May cause genetic defects
H350    May cause cancer
H372    Causes damage to organs through prolonged or repeated exposure

Precautionary Statement(s)
P201    Obtain special instructions before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. # No smoking.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.


Symbol(s)

R-Phrase(s)
R45 May cause cancer.
R46 May cause heritable genetic damage.
R11 Highly flammable.
R36/38 Irritating to eyes and skin.
R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R65 Harmful: may cause lung damage if swallowed.

S-Phrase(s)
S53 Avoid exposure - obtain special instructions before use.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards - none

3. Composition/Information on Ingredients

3.1 Substances
Synonym: Cyclohexatriene

Molecular Formula \( \text{C}_6\text{H}_6 \)
Molecular Weight 78.11

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene, Hi-AR\textsuperscript{TM}</td>
<td></td>
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<tr>
<td>CAS-No.</td>
<td>71-43-2</td>
</tr>
<tr>
<td>EC-No.</td>
<td>200-753-7</td>
</tr>
<tr>
<td>Index-No.</td>
<td>601-020-00-8</td>
</tr>
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</table>

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
No data available

4.3 Indication of immediate medical attention and special treatment needed
No data available
5. **Fire Fighting 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 **Precautions for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 **Further information**

No data available

6. **Accidental Release Measures**

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

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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.

7. **Handling and Storage**

7.1 **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.3 **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.

Recommended Storage Temperature : Store below 30°C

7.3 **Specific end uses**

No data available

8. **Exposure Controls/Personal Protection**

8.1 **Control parameters**

Components with workplace control parameters

8.2 **Exposure controls**

**Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
**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 work place.

**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 the 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).

**Environment exposure controls**
Do not empty into drains

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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
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<td>Appearance</td>
<td>Clear Colorless Liquid</td>
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<tr>
<td>pH</td>
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<td>Flash point</td>
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<td>Water Solubility</td>
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<tr>
<td>Decomposition Temperature</td>
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<td>Viscosity</td>
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<tr>
<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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</tbody>
</table>

9.2 Other safety information
No data available

10 Stability and Reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
No data available

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - No data available

11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available
**Germ cell mutagenicity**
No data available

**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

**Specific target organ toxicity - single exposure**
No data available

**Aspiration hazard**
No data available

**Potential Health Effects**

**Inhalation.**
Refer Section 2

**Skin**
Refer Section 2

**Eyes**
Refer Section 2

**Ingestion**
Refer Section 2

**Additional Information**
RTECS: CY1400000

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**12 Ecological Information**

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 PBT and vPvB assessment**
No data available

**12.6 Other adverse effects**
No data available

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**13 Disposal Considerations**

**13.1 Waste treatments methods**

**Product**
Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

**13.2 Contaminated packaging**
Dispose of as unused product.

---

**14 Transport Information**

**14.1 UN-No.**
ADR/RID: 1114  
IMDG: 1114  
IATA: 1114

**14.2 UN proper shipping name**
ADR/RID: Benzene, Hi-AR™
IMDG: Benzene, Hi-AR™
IATA: Benzene, Hi-AR™

**14.3 Transport hazard class(es)**
ADR/RID: 3  
IMDG: 3  
IATA: 3

**14.4 Packaging group**
ADR/RID: 2  
IMDG: 2  
IATA: 2
14.5 Environmental hazards
ADR/RID: No    IMDG: Marine Pollutant: No    IATA: No

14.6 Special precautions for use
No data available

15 Regulatory Information
This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

15.1 Safety health and environment regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
No data available

16 Other Information
Further information
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