

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

## MATERIAL SAFETY DATA SHEET (MSDS)

### ISO-PENTANE AR (FOR SYNTHESIS)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : ISO-PENTANE AR (FOR SYNTHESIS)

Product code : SS0117900500

Identification of the product : isopentane- 2-methylbutane  
 CAS No: 78-78-4  
 EC No :201-142-8  
 Annex No :601-085-00-2

Chemical formula : C<sub>5</sub>H<sub>12</sub>

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

Use : Industrial. For professional use only.

##### 1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM  
 Chaitanya Tower, 2nd Floor, Office # 206,  
 Siddharth Nagar, S.V. Road,  
 Goregaon (West), Mumbai - 400062,  
 Maharashtra, India.  
 Contact: +91 22 28725393 / 94 / 95  
 Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

##### Classification EC 67/548 or EC 1999/45

Classification : R67  
 N; R51-53

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 -  
 Warning (CLP : STOT SE 3) H336

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 2 (CLP :  
 Aquatic Chronic 2) H411

##### 2.2. Label elements

**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**2. Hazards identification -DSD (continued)**
**Labelling EC 67/548 or EC 1999/45**
**Symbol(s)**

**Symbol(s)**

: N : Dangerous for the environment

**R Phrase(s)**

: R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 : Vapours may cause drowsiness and dizziness.

**S Phrase(s)**

: S35 : This material and its container must be disposed of in a safe way.

S51 : Use only in well-ventilated areas.

S57 : Use appropriate container to avoid environmental contamination.

S59 : Refer to manufacturer/supplier for information on recovery/recycling.

S60 : This material and its container must be disposed of as hazardous waste.

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Contains**

: isopentane- 2-methylbutane

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Warning

**Hazard statements**

: H336 : May cause drowsiness or dizziness.

H411 : Toxic to aquatic life with long lasting effects.

**Precautionary statements**
**• Prevention**

: P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

**• Response**

: P391: Collect spillage.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

**• Storage**

: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Contains**

: isopentane- 2-methylbutane

**2.3. Other hazards**

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## MATERIAL SAFETY DATA SHEET (MSDS)

### ISO-PENTANE AR (FOR SYNTHESIS)

#### 2. Hazards identification -DSD (continued)

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : isopentane- 2-methylbutane

EC No :201-142-8  
 Annex No :601-085-00-2  
 Substance.

**Hazardous component(s)** : This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
isopentane- 2-methylbutane	100	78-78-4	201-142-8	601-085-00-2	----	F+; R12 Xn; R65 R66 R67 N; R51-53 ----- Flam. Liq. 1 _ H224 Asp. Tox 1 _ H304 STOT SE 3 _ H336 STOT RE _ EUH066 Aquatic Chronic 2 _ H411

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion** : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

**Symptoms relating to use** : May cause drowsiness or dizziness.

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

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**5. Fire-fighting measures**
**5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
<b>Unsuitable extinguishing media</b>	: Do not use a heavy water stream.
<b>Surrounding fires</b>	: Use water spray or fog for cooling exposed containers.

**5.2. Special hazards arising from the substance or mixture**

<b>Hazardous combustion products</b>	: Under fire conditions, hazardous fumes will be present.
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**5.3. Advice for fire-fighters**

<b>Protection against fire</b>	: Do not enter fire area without proper protective equipment, including respiratory protection.
<b>Special procedures</b>	: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

<b>For emergency responders</b>	: Equip cleanup crew with proper protection. Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.
<b>For non-emergency personnel</b>	: Evacuate unnecessary personnel.

**6.2. Environmental precautions**

<b>Environmental precautions</b>	: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.
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**6.3. Methods and material for containment and cleaning up**

<b>Clean up methods</b>	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**7. Handling and storage**
**7.1. Precautions for safe handling**

<b>Handling</b>	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Use only outdoors or in a well-ventilated area.
<b>Technical protective measures</b>	: Provide good ventilation in process area to prevent formation of vapour.
<b>Special precautions</b>	: Avoid breathing dust, fume, gas, mist, vapours, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	: Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.
<b>Storage - away from</b>	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

<b>Specific end use(s)</b>	: None.
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**8. Exposure controls/personal protection**
**8.1. Exposure controls**

<b>Personal protection</b>	: Avoid all unnecessary exposure.
• <b>Respiratory protection</b>	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
• <b>Hand protection</b>	: Wear protective gloves.
• <b>Eye protection</b>	: Chemical goggles or safety glasses.
• <b>Others</b>	: When using, do not eat, drink or smoke.

**8.2. Control parameters**

<b>Occupational Exposure Limits</b>	: No data available.
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**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Physical state at 20 °C</b>	: Liquid.
<b>Colour</b>	: Colorless
<b>Odour</b>	: Characteristic.
<b>Odour threshold</b>	: No data available.

**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**9. Physical and chemical properties (continued)**

pH value	: No data available.
Melting point [°C]	: No data available.
Decomposition point [°C]	: No data available.
Critical temperature [°C]	: No data available.
Auto-ignition temperature [°C]	: No data available.
Flammability (solid, gas)	: No data available.
Flash point [°C]	: No data available.
Initial boiling point [°C]	: No data available.
Final boiling point [°C]	: No data available.
Evaporation rate	: No data available.
Vapour pressure [20°C]	: No data available.
Vapour density	: No data available.
Density [g/cm <sup>3</sup> ]	: No data available.
Relative density, liquid (water=1)	: No data available.
Solubility in water	: No data available.
Log Pow octanol / water at 20°C	: No data available.
Viscosity at 40°C [mm <sup>2</sup> /s]	: No data available.

**9.2. Other information**

Explosive properties	: No data available.
Explosion limits - upper [%]	: No data available.
Explosion limits - lower [%]	: No data available.
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**10. Stability and reactivity (continued)**

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

Materials to avoid : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : Based on available data, the classification criteria are not met.

Corrosion : Based on available data, the classification criteria are not met.

Irritation : Based on available data, the classification criteria are not met.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

Toxicity information : Toxic to aquatic life with long lasting effects.

**12.2. Persistence - degradability**

Persistence - degradability : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**

Bioaccumulative potential : Not established.



**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**12. Ecological information (continued)**
**12.4. Mobility in soil**

Mobility in soil : Not established.

**12.5. Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

Environmental precautions : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

 General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

 Proper shipping name : PENTANES, liquid  
 UN N° : 1265  
 H.I. nr : 33  
 ADR - Class : 3  
 Labelling - Transport : 3 : Flammable liquid. 9 : Miscellaneous dangerous substances and articles.

 ADR - Classification code : F1  
 ADR - Group : II  
 ADR - Packing instructions : P001  
 ADR - Limited Quantity : 1 L  
 ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.



**MATERIAL SAFETY DATA SHEET (MSDS)**
**ISO-PENTANE AR (FOR SYNTHESIS)**
**14. Transport information (continued)**

**14.2. Sea transport (IMDG) [English only]**

Proper shipping name	: PENTANES, liquid
UN N°	: 1265
IMO-IMDG - Class or division	: 3 : Flammable liquid. ( 9 : Miscellaneous dangerous substances and articles. )
IMO-IMDG - Packing group	: II
IMO- IMDG - Packing instructions	: P001
IMO-IMDG - Limited quantities	: 1 L
IMO-IMDG - Marine pollution	: No
EMS-Nr	: F-E S-D

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name	: PENTANES, liquid
UN N°	: 1265
IATA - Class or division	: 3 : Flammable liquid. ( 9 : Miscellaneous dangerous substances and articles. )
IATA - Packing group	: II
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 353
- Passenger and Cargo - Maximum Quantity/Packing	: 5 L
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 364
- Cargo only - Maximum Quantity/ Packing	: 60 L
IATA - Limited Quantities	: 1 L
ERG-Nr	: 3H

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

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
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## MATERIAL SAFETY DATA SHEET (MSDS)

### ISO-PENTANE AR (FOR SYNTHESIS)

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

#### DISCLAIMER:

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