

MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

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

1.1. Product identifier

Trade name : BENZENE AR

Product code : SS0100900500

Identification of the product : Benzene
CAS No :71-43-2
EC No :200-753-7
Annex No :601-020-00-8

Chemical formula : C₆H₆

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 : F; R11
Carc. Cat. 1; R45
Muta. Cat. 2; R46
T; R48/23/24/25
Xn; R65
Xi; R36/38

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

Health hazards : Carcinogenicity - Category 1A - Danger (CLP : Carc. 1A) H350
Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP :
STOT RE 1) H372
Aspiration hazard - Category 1 - Danger (CLP : Asp. Tox. 1) H304

MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

2. Hazards identification -DSD (continued)

Physical hazards
 Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319
 Germ cell mutagenicity - Category 1B - Danger (CLP : Muta. 1B) H340
 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315
 : Flammable liquids - Category 2 - Danger (CLP : Flam. Liq. 2) H225

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s)



Symbol(s)

: F : Highly flammable
 T : Toxic

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 when possible).

Contains

: Benzene

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms



Signal words

: Danger

Hazard statements

: H225 : Highly flammable liquid and vapour.
 H304 : May be fatal if swallowed and enters airways.
 H350 : May cause cancer.
 H340 : May cause genetic defects.
 H319 : Causes serious eye irritation.
 H315 : Causes skin irritation.
 H372 : Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- General
- Prevention

: P201: Obtain special instructions before use.
 : P240: Ground/bond container and receiving equipment.
 P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.
 P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking.

CHAITANYA CHS, 2nd 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)

BENZENE AR

2. Hazards identification -DSD (continued)

- P280: Wear protective gloves, protective clothing, eye protection, face protection.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
P233: Keep container tightly closed.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
- **Response** : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P308+P313: If exposed or concerned : get medical advice.
P332+P313: If skin irritation occurs : Get medical advice.
P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.
P314: Get medical advice if you feel unwell.
P370+P378: In case of fire: Use for extinction.
- **Storage** : P403+P235: Store in well-ventilated place. Keep cool.
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.
- Special labelling** : Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)
- Contains** : Benzene
- 2.3. Other hazards**
- 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 : Benzene
CAS No :71-43-2
EC No :200-753-7
Annex No :601-020-00-8
Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Benzene	100 %	71-43-2	200-753-7	601-020-00-8	---	F; R11 Carc. Cat. 1; R45 Muta. Cat. 2; R46 T; R48/23/24/25 Xn; R65 Xi; R36/38 Flam. Liq. 2 _ H225 Carc. 1A _ H350 Muta. 1B _ H340 STOT RE 1 _ H372 Asp. Tox 1 _ H304 Eye irrit 2 _ H319 Skin Irrit. 2 _ H315

MATERIAL SAFETY DATA SHEET (MSDS)
BENZENE AR
3. Composition/information on ingredients (continued)

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	: Assure fresh air breathing. Allow the victim to rest.
Skin contact	: Specific treatment (see on this label). Get medical advice. If skin irritation occurs : Wash contaminated clothing before reuse. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice. If eye irritation persists :
Ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

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

Symptoms relating to use	: May cause cancer. May cause genetic defects. Causes damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Causes serious eye irritation. Causes skin irritation.
--------------------------	---

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).
---------------------	---

5. Fire-fighting measures
5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Flammable class	: Highly flammable liquid and vapour.
Hazardous combustion products	: Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

5. Fire-fighting measures (continued)

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : 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

- For emergency responders** : Equip cleanup crew with proper protection. Ventilate area.
- Technical measures** : Use special care to avoid static electric charges.
- Special precautions** : Remove ignition sources. No naked lights. No smoking.
- For non-emergency personnel** : Evacuate unnecessary personnel.

6.2. Environmental precautions

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

- Handling** : Handle empty containers with care because residual vapours are flammable. Wash thoroughly after handling. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Eliminate all ignition sources if safe to do so. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
- Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.
- Special precautions** : No naked lights. No smoking.

MATERIAL SAFETY DATA SHEET (MSDS)
BENZENE AR
7. Handling and storage (continued)
7.2. Conditions for safe storage, including any incompatibilities

- Storage** : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.
- Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

- Specific end use(s)** : None.

8. Exposure controls/personal protection
8.1. Exposure controls

- Personal protection** : Avoid all unnecessary exposure.
- **Respiratory protection** : Wear respiratory protection.
 - **Hand protection** : Wear protective gloves.
 - **Skin protection** : Wear suitable protective clothing.
 - **Eye protection** : Chemical goggles or safety glasses.
 - **Others** : When using, do not eat, drink or smoke.

8.2. Control parameters

- Occupational Exposure Limits** : No data available.

9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

- Physical state at 20 °C** : Liquid.
- Colour** : Colorless
- Odour** : Characteristic.
- Odour threshold** : No data available.
- 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)** : Highly flammable liquid and vapour.

MATERIAL SAFETY DATA SHEET (MSDS)
BENZENE AR
9. Physical and chemical properties (continued)

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 ³]	: 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 ² /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.
------------	--------------------

10.2. Chemical stability.

Chemical stability	: Stable under recommended storage conditions.
--------------------	--

10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
---------------------	--------------------

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid	: Strong acids. Strong bases.
--------------------	-------------------------------

10.6. Hazardous decomposition products

MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

10. Stability and reactivity (continued)

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.
 May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

- **Inhalation** : May be fatal if swallowed and enters airways.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : May be fatal if swallowed and enters airways.

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

Irritation : Causes serious eye irritation.
 Causes skin irritation.

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

Mutagenicity : May cause genetic defects.

Carcinogenicity : May cause cancer.

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

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

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

12. Ecological information

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

MATERIAL SAFETY DATA SHEET (MSDS)
BENZENE AR
12. Ecological information (continued)

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.

Special precautions : Handle empty containers with care because residual vapours are flammable.
 Hazardous waste due to toxicity.

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

Proper shipping name : BENZENE
UN N° : 1114
H.I. nr : 33
ADR - Class : 3
Labelling - Transport : 3 : Flammable liquid.



ADR - Classification code : F1
 F1
ADR - Group : II
ADR - Packing instructions : P001 R001
ADR - Limited Quantity : 1 L
ADR - Tunnel code



MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

14. Transport information (continued)

: D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name : BENZENE
UN N° : 1114
IMO-IMDG - Class or division : 3 : Flammable liquid.
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 : BENZENE
UN N° : 1114
IATA - Class or division : 3 : Flammable liquid.
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.

REACH Restrictions - Annex XVII : Annex XVII
With the exception of those listed below:
The components of this product are not subject to restrictions.

MATERIAL SAFETY DATA SHEET (MSDS)

BENZENE AR

15. Regulatory information (continued)

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Revision : Revision - See : *

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

List of relevant R phrases (heading 3) : R11 : Highly flammable.
R36/38 : Irritating to eyes and skin.
R45 : May cause cancer.
R46 : May cause heritable genetic damage.
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.

List of full text of H-statements in section 3 : 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.

Further information : None.

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

DISCLAIMER:

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

End of document