

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)

TOLUENE AR

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

1.1. Product identifier

Trade name : TOLUENE AR

Product code : SS0105302500

Identification of the product : Toluene
 CAS No: 108-88-3
 EC No :203-625-9
 Annex No :601-021-00-3

Chemical formula : C₇H₈ - (C(CH₃)CHCHCHCHCH)

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
 Repr. Cat. 3; R63
 Xn; R65-48/20
 R67
 Xi; R38

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

Health hazards : Reproductive toxicity - Unborn Child - Category 2 - Warning (CLP : Repr. 2) H361
 Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -
 Category 3 - Warning (CLP : STOT SE 3) H335
 Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 -
 Warning (CLP : STOT SE 3) H336

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
2. Hazards identification -DSD (continued)

Physical hazards : Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP : STOT RE 2) H373
 Aspiration hazard - Category 1 - Danger (CLP : Asp. Tox. 1) H304
 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
 Xn : Harmful

R Phrase(s)

: R11 : Highly flammable.
 R38 : Irritating to skin.
 R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation.
 R63 : Possible risk of harm to the unborn child.
 R65 : Harmful : may cause lung damage if swallowed.
 R67 : Vapours may cause drowsiness and dizziness.

S Phrase(s)

: S2 : Keep out of the reach of children.
 S36/37 : Wear suitable protective clothing and gloves.
 S62 : If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label.

Contains

: Toluene

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.
 H315 : Causes skin irritation.
 H335 : May cause respiratory irritation.
 H336 : May cause drowsiness or dizziness.
 H373 : May cause damage to organs through prolonged or repeated exposure.
 H361d: Suspected of damaging the unborn child.

Precautionary statements

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)

TOLUENE AR

2. Hazards identification -DSD (continued)

- **General** : P102: Keep out of reach of children.
P103: Read label before use.
P101: If medical advice is needed, have product container or label at hand.
P201: Obtain special instructions before use.
- **Prevention** : 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.
P280: Wear protective gloves, protective clothing, eye protection, face protection.
P271: Use only outdoors or in a well-ventilated area.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
P233: Keep container tightly closed.
P264: Wash thoroughly after handling.
- **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.
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
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+P233: Store in well-ventilated place. Keep container tightly closed.
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.
- Contains** : Toluene

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 : Toluene

EC No :203-625-9
 Annex No :601-021-00-3
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Toluene	100 %	108-88-3	203-625-9	601-021-00-3	----	F; R11 Repr. Cat. 3; R63 Xn; R65-48/20 R67 Xi; R38 ----- Flam. Liq. 2 _ H225 Asp. Tox 1 _ H304

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

 Repr. 2 _ H361d
 Skin Irrit. 2 _ H315
 STOT SE 3 _ H335
 STOT RE 2 _ H373
 STOT SE 3 _ H336

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	: Wash contaminated clothing before reuse. If skin irritation occurs : Wash with plenty of soap and water. Get medical advice. Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing.
Eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
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	: Causes damage to organ. May be fatal if swallowed and enters airways. Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child.
--------------------------	---

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

General information	: Never give anything by mouth to an unconscious person. If exposed or concerned : get medical advice.
---------------------	---

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.

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
5. Fire-fighting measures (continued)
5.3. Advice for fire-fighters

- 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.
Avoid breathing dust, fume, gas, mist, vapours, spray.
- 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. Collect spillage. Store away from other materials.

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. Obtain special instructions before use. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
- 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.

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
7. Handling and storage (continued)

Special precautions : No naked lights. No smoking. Avoid breathing dust, fume, gas, mist, vapours, spray.

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** : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
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.

ILV (EU) - 8 H - [ppm] : (50 Skin.)

ILV (EU) - 8 H - [mg/m³] : (192 Skin.)

ILV (EU) - 15 min - [ppm] : (100 Skin.)

ILV (EU) - 15 min - [mg/m³] : (384 Skin.)

OEL (UK)-LTEL [ppm] : 50

OEL (UK)-STEL [ppm] : 150

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

Physical state at 20 °C : Liquid.

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

Colour	: Clear Colorless
Odour	: Aromatic benzene-like
Odour threshold	: No data available.
pH value	: No data available.
Melting point [°C]	: -95
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: 535
Flammability (solid, gas)	: Flammable. Highly flammable liquid and vapour.
Flash point [°C]	: 4°C
Boiling point [°C]	: 110 - 111 °C
Initial boiling point [°C]	: 110 °C
Final boiling point [°C]	: 111 °C
Evaporation rate	: 2,24
Vapour pressure [20°C]	: 22 @ 20C
Vapour pressure mm/Hg	: 22 @ 20C
Vapour density	: 3,14
Density [g/cm3]	: 0,86
Relative density, gas (air=1)	: 3.2
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Insoluble.
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm2/s]	: N/A

9.2. Other information

Explosive properties	: N/A
Explosion limits - upper [%]	: 7
Explosion limits - lower [%]	: 1.2
Oxidising properties	: No data available.

10. Stability and reactivity
10.1. Reactivity

Reactivity	: Not established.
------------	--------------------

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
10. Stability and reactivity (continued)
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

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.
- **Rat oral LD50 [mg/kg]** : 7000

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

Irritation : Causes skin irritation.
May cause respiratory irritation.

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 : Suspected of damaging the unborn child.

STOT-single exposure : May cause drowsiness or dizziness.

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

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

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
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.

Log Pow octanol / water at 20°C : 2.6

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.

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 : TOLUENE
 UN N° : 1294

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
14. Transport information (continued)

H.I. nr : 33
 ADR - Class : 3
 Labelling - Transport : 3 : Flammable liquid.



ADR - Classification code : F1
 ADR - Group : II
 ADR - Packing instructions : P001 R001
 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.


14.2. Sea transport (IMDG) [English only]

Proper shipping name : TOLUENE
 UN N° : 1294
 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 : TOLUENE
 UN N° : 1294
 IATA - Class or division : 3 : Flammable liquid.
 IATA - Packing group : II
 IATA - Passenger and Cargo Aircraft : ALLOWED
 - Passenger and Cargo - Packing : 353
 instruction
 - Passenger and Cargo - Maximum : 5 L
 Quantity/Packing
 IATA - Cargo only : ALLOWED

MATERIAL SAFETY DATA SHEET (MSDS)
TOLUENE AR
14. Transport information (continued)

- Cargo only - Packing instruction : 364
- Cargo only - Maximum Quantity/ Packing : 60 L
- IATA - Limited Quantities : 1 L
- ERG-Nr : 3L

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 : With the exception of those listed below:
Annex XVII
The components of this product are not subject to restrictions.
- 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.
R38 : Irritating to skin.
R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation.
R63 : Possible risk of harm to the unborn child.
R65 : Harmful : may cause lung damage if swallowed.
R67 : Vapours may cause drowsiness and dizziness.
- 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.
H335 : May cause respiratory irritation.
H336 : May cause drowsiness or dizziness.
H361U : Suspected of damaging the unborn child.
H373 : May cause damage to organs through prolonged or repeated exposure.

MATERIAL SAFETY DATA SHEET (MSDS)

TOLUENE AR

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