

MATERIAL SAFETY DATA SHEET (MSDS)

TOLUENE HPLC

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

1.1. Product identifier

Trade name : TOLUENE HPLC

Product code : SS0106502500

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 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

Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP:

STOT RE 2) H373



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2. Hazards identification -DSD (continued)

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

Physical hazards

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

• **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.



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2. Hazards identification -DSD (continued)

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.
 C

 Toluene
 :
 100 %
 108-88-3
 203-625-9
 601-021-00-3
 ---- F;

Classification F; R11

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

Flam. Liq. 2 _ H225 Asp. Tox 1 _ H304 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.



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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.

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

redness persist.

: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or Ingestion

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.

: Do not use a heavy water stream. Unsuitable extinguishing media

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.

: Under fire conditions, hazardous fumes will be present. **Hazardous combustion products**

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.



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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.

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.



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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
 Eye protection
 Chemical goggles or safety glasses.
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 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.

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 °CInitial boiling point [°C]: 110 °CFinal boiling point [°C]: 111 °CEvaporation rate: 2,24



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9. Physical and chemical properties (continued)

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.

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.



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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.

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



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12. Ecological information (continued)

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 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.



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14. Transport information (continued)

IMO-IMDG - Packing group : 11 **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 : 1294 UN N°

IATA - Class or division : 3 : Flammable liquid.

IATA - Packing group : 11

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 353

instruction

- Passenger and Cargo - Maximum : 5 L

Quantity/Packing

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 364 - Cargo only - Maximum Quantity/ : 60 L

IATA - Limited Quantites : 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.

: 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

REACH Restrictions - Annex XVII

Chemical Safety Assessment : It has not been carried out.

16. Other information

: Revision - See : * Revision



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In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

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