

MATERIAL SAFETY DATA SHEET

TOLUENE 99.8% (HPLC) MSDS CAS : 108-88-3

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product

Product Name : TOLUENE

CAS#: 108-88-3

C.I. No.: Not available.

Synonym : Not available.

Chemical Name: Not available.

Chemical Formula: C₇H₈

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet:

Company identification: **OXFORD LAB FINE CHEM LLP**
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
TOLUENE	108-88-3	100%

Section 3: Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 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

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.

Section 4: First Aid Measures

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.

Section 4: First Aid Measures (Continued)

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.

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.

Section 5: Fire and Explosion Data

Extinguishing media

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.

Special hazards arising from the substance or mixture

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

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.

Section 6: Accidental Release Measures

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.

Section 6: Accidental Release Measures (Continued)

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

Section 7: Handling and Storage

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.
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 regulation	: Comply with applicable regulations.
Storage - away from	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.
Specific end uses	
Specific end use(s)	: None.

Section 8: Exposure Controls/Personal Protection

Personal protection

• Respiratory protection

- : Avoid all unnecessary exposure.
- : 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.

Control parameters

Occupational Exposure Limits

ILV (EU) - 8 H - [ppm]	: No data available.
ILV (EU) - 8 H - [mg/m ³]	: (50 Skin.)
ILV (EU) - 15 min - [ppm]	: (192 Skin.)
ILV (EU) - 15 min - [mg/m ³]	: (100 Skin.)
OEL (UK)-LTEL [ppm]	: (384 Skin.)
OEL (UK)-STEL [ppm]	: 50
	: 150

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid
Color	: Clear Colourless
Odor	: Aromatic benzene-like
Odor 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

Section 9: Physical and Chemical Properties (Continued)

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
Molecular Weight	: 92.14

Other information

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

Section 10: Stability and Reactivity Data

Reactivity

Reactivity : Not established.

Chemical stability

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions : Not established.

Conditions to avoid

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

Section 10: Stability and Reactivity Data (Continued)

Incompatible materials

Materials to avoid : Strong acids. Strong bases.

Hazardous decomposition products

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

Section 11: Toxicological Information

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 : Causes severe skin burns and eye damage.
- Irritation : Causes serious eye 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.

Section 12: Ecological Information

Toxicity

Toxicity information : Not established.

Persistence – degradability

Persistence - degradability : Biodegradable.

Section 12: Ecological Information (Continued)

Bio accumulative potential

Bio accumulative potential : Not established.

Mobility in soil

Mobility in soil : Not established.

Log Pow octanol / water at 20°C : 2.6

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.

Other adverse effects

Environmental precautions: Avoid release to the environment.

Section 13: Disposal Considerations

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.

Section 14: Transport Information

Land transport (ADR-RID)

Proper shipping name	: TOLUENE
UN N°	: 1294
H.I. nr	: 33
ADR - Class	: 3
Labelling - Transport	: 3 : Flammable liquid.
ADR - Group	: II

Section 14: Transport Information (Continued)

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

Air transport (ICAO-IATA) [English only]

Proper shipping name : TOLUENE
UN N° : 1294
IATA - Class or division : 3 : Flammable liquid.
IATA - Packing group : II

Section 15: Other Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental: Ensure all national/local regulations are observed.
Regulations/legislation specific for
The substance or mixture

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.
REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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