



TOLUENE MSDS

Toluene

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME Toluene
SYNONYMS, TRADE NAMES Phenyl Methane, , Toluol, , Methyl Benzene,

2 HAZARDS IDENTIFICATION

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

CLASSIFICATION Xn;R48/20, R65. Rep 3;R63. Xi;R38. F;R11. R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Classification	Content	
TOLUENE	203-625-9	108-88-3		50-100%	F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION

Remove victim immediately from source of exposure. Get medical attention.

INGESTION

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

UNUSUAL FIRE & EXPLOSION HAZARDS

HIGHLY FLAMMABLE!

Toluene

SPECIFIC HAZARDS

Oxides of: Carbon.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Take precautionary measures against static discharges. Do not smoke, use naked flames or other sources of ignition.

ENVIRONMENTAL PRECAUTIONS

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Remove sources of ignition. Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Static electricity and formation of sparks must be prevented. Eliminate all sources of ignition. Provide good ventilation.

STORAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep in original container.

STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
TOLUENE		50 ppm(Sk)	191 mg/m3(Sk)	100 ppm(Sk)	384 mg/m3(Sk)	

mg/m3(Sk)

PROTECTIVE EQUIPMENT



RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

Nitrile gloves are recommended.

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear rubber apron. Wear rubber footwear.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Liquid

COLOUR

Colourless

ODOUR

Aromatic hydrocarbons

SOLUBILITY

Slightly soluble in water.

MOL. WEIGHT

92

BOILING POINT (°C)

110 - 111

Toluene

MELTING POINT (°C)	-95	BULK DENSITY	871 kg/m ³
VAPOUR DENSITY (air=1)	3.1	VAPOUR PRESSURE	3 - 3.5 kPa 20
EVAPORATION RATE	6.1	FLASH POINT (°C)	4
AUTO IGNITION TEMPERATURE (°C)	480 - 536	FLAMMABILITY LIMIT - LOWER(%)	1.2
FLAMMABILITY LIMIT - UPPER(%)	8	PARTITION COEFFICIENT (N-Octanol/Water)	2.65

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

MATERIALS TO AVOID

Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of: Carbon.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 >2000 mg/kg (oral rat)

INHALATION

Harmful by inhalation.

INGESTION

May cause discomfort if swallowed.

SKIN CONTACT

Irritating to skin.

EYE CONTACT

Irritating to eyes.

12 ECOLOGICAL INFORMATION

MOBILITY

The product has poor water-solubility.

BIOACCUMULATION

The product is not bioaccumulating.

DEGRADABILITY

The product is biodegradable.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. Do not puncture or incinerate even when empty. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION



Toluene

UK ROAD CLASS	3	UK ROAD PACK GR.	II
PROPER SHIPPING NAME	TOLUENE	ADR CLASS	Class 3: Flammable liquids.
UN NO. ROAD	1294	HAZARD No. (ADR)	33
ADR CLASS NO.	3	HAZCHEM CODE	3YE
ADR PACK GROUP	II	RID CLASS NO.	3
ADR LABEL NO.	3	UN NO. SEA	1294
CEFIC TEC(R) NO.	30GF1-I+II	IMDG PACK GR.	II
RID PACK GROUP	II	MFAG	See Guide
IMDG CLASS	3	UN NO. AIR	1294
EMS	F-E, S-D	AIR PACK GR.	II
MARINE POLLUTANT	No.		
AIR CLASS	3		

15 REGULATORY INFORMATION

LABELLING



Harmful



Highly Flammable

CONTAINS TOLUENE

RISK PHRASES

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.

SAFETY PHRASES

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S24	Avoid contact with skin.
S36/37	Wear suitable protective clothing and gloves.
S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. DSEAR

GUIDANCE NOTES

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

16 OTHER INFORMATION

REVISION DATE	5th February 2009
REV. NO./REPL. SDS GENERATED	07
SDS NO.	T009

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