



SDS

COD:BI-HSE-SFO-0250-00

Product Name: TOLUENE

Company: Bandar Imam Petrochemical Company-Faravaresh

Catalogue NO: S.T.1294.3

Unit: AR

Section 1: Identification

Product Name : TOLUENE	Other Name: methyl benzene,methyl benzole.			<input type="checkbox"/> Flammability <input type="checkbox"/> Health <input type="checkbox"/> Instability <input type="checkbox"/> Special hazard	
Formula: C ₆ H ₅ CH ₃	CAS NO: 108-88-3	UN NO: 1294	Class: 3		
Identified Uses: Reagent for analysis, Solvent.					
Telephone & Telefax: 0615225-2300 , 2311		Address Email : dmoffice@bipc.org.ir			
Emergency phone number: 2222-125-119 / 2242-115					

Section 2: Hazard(s) Identification

Classification of the substance or mixture: Flammable liquid, Skin irritation, Specific target organ toxicity - repeated exposure, Central nervous system, Reproductive toxicity, Aspiration hazard, Specific target organ toxicity - single exposure, Central nervous system.

Label elements: Labelling according Regulation (EC) No 1272/2008 Signal word: Danger	Hazard pictogram		
	Flammable	Harmful	Irritation

Hazard statements: Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water.

Get medical advice/ attention if you feel unwell.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Other hazards: None known.

Section 3: Composition/Information on Ingredients

Substance:				
Name	Formula	CAS NO	Concentration%	Classification
TOLUENE	C ₆ H ₅ CH ₃	108-88-3	<= 100 %	Flammable liquid, Skin irritation. See section2.

Mixture: Not applicable.

Section 4: First-Aid Measures

Description of first aid measures

After inhalation: After inhalation fresh air. Call in physician.

Following skin contact : Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Call a physician immediately. Pulmonary failure possible after aspiration of vomit.

Most important symptoms and effects,both acute and delayed: irritant effects, Headache, Drowsiness, Dizziness, Nausea, Vomiting, inebriation, Convulsions, somnolence, Circulatory collapse, CNS disorders, respiratory paralysis, respiratory arrest, Unconsciousness, death.

Indication of any immediate medical attention and special treatment needed: No information available.

Section 5: Fire-Fighting Measures

Extinguishing Media

Suitable extinguishing media: Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media:-

Special hazards arising from the substance or mixture: Combustible, Pay attention to flashback, Vapours are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.

Advice for firefighters

Special protective equipment for firefighters: Special protective equipment for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information: Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Personal precautions ,protective equipment and emergency procedures for:

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.



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Advice for emergency responders: Protective equipment see section 8.

Environmental precautions: Do not let product enter drains. Risk of explosion.

Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.

Reference to other sections: Indications about waste treatment see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Advice on safe handling: observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion: Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Recommended storage temperature see product label.

Section 8: Exposure Controls/Personal Protection

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Using the earth system, Topical ventilation, Gas detectors, Cooling system fire tanks and Anti spark system.

Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection: Safety glasses.

Hand protection:

	Full contact	splash contact
Glove material	Viton(R)	Viton(R)
Glove thickness	0.70 mm	0.70 mm
Break through time	>480 min	>480 min

Other protective equipment: Flame retardant antistatic protective clothing.

Respiratory protection: required when vapours / aerosols are generated. Recommended filter type A for vapours of organic compounds.

Environmental exposure controls: Environmental exposure controls. Do not let product enter drains. Risk of explosion.

Section 9: Physical and Chemical Properties

From: Liquid.	Density: 0.87 g/cm ³ at 20 °C	PH: Not applicable.
Color: colorless.	Relative vapour density: 3.1 g/cm ³	FLASH POINT: 4 °C
Odour: characteristic / smells like benzene.	Vapour pressure: 29 hPa at 20 °C	AUTOIGNITION TEMP: 535 °C
Molar Mass: 92,14 g/mol	Viscosity dynamic: 0,6 mPa.s at 20 °C	LEL (V/V %): 1.1% V
Water solubility: 0.52 g/l at 20 °C	Oxidizing properties: none.	UEL (V/V %): 7.1% V
Melting point/range: -95 °C	Decomposition temperat: Distillable in an undecomposed state at normal pressure.	Explosive properties: Not classified as explosive.
Boiling point/range: 110,6 °C		

Section 10: Stability and Reactivity

Reactivity: Vapours may form explosive mixture with air.

Chemical stability: The product is chemically stable under standard ambient conditions.

Possibility of hazardous reactions

Risk of explosion with: fuming sulfuric acid, Nitric acid, silver, perchlorates, nitrogen dioxide, nonmetallic halides, acetic acid, halogen-halogen compounds, uranium hexafluoride, organic nitro compounds.

Violent reactions possible with: Strong acids, Strong oxidizing agents.

Conditions to avoid: Warming.

Incompatible materials: rubber, various plastics.

Hazardous decomposition products: no information available.

Section 11: Toxicological Information

Information on toxicological effects		Endpoint	Species	Exposure route	Value
OT:0.2-68.6 PPM	TLV-TWA:100 PPM	LD50	Rat	skin	5.580 mg/kg
IDLH:2000 PPM	TLV-STEL:150 PPM	LC50	Rat	inhalation	25,7 mg/l; 4 h ; vapour

Sensitisation: This information is not available. **Carcinogenicity:** This information is not available. **Teratogenicity:** Suspected of damaging the unborn child.

Symptoms: Irritation symptoms in the respiratory tract. Nausea, Vomiting, Irritation symptoms in the respiratory tract, Skin irritation, Eye irritation.



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Specific target organ toxicity: May cause damage to organs through prolonged or repeated exposure. Target Organs: Central nervous system. may cause pulmonary oedema and pneumonitis.

Further information

Systemic effects:

After absorption of large quantities: Headache, Vomiting, Nausea, Dizziness, CNS disorders, inebriation, Convulsions, Circulatory collapse, respiratory paralysis, respiratory arrest, Unconsciousness, death

Other dangerous properties can not be excluded. This substance should be handled with particular care.

Section 12: Ecological Information (non-mandatory)

Toxicity: Toxic to fish, daphnia and other aquatic invertebrates algae bacteria

Persistence and degradability

Biodegradability: Readily biodegradable.

Bioaccumulative potential: Bioaccumulation is not expected.

Mobility in soil: Moderately mobile in soils.

Other adverse effects: Distribution preferentially in air. Discharge into the environment must be avoided.

Section 13: Disposal Considerations (non-mandatory)

Sewage disposal-relevant information : Avoid transferring material to another location.

Collect it with sand and other absorbent materials. Pour into the pan. Rinse the contaminated environment with appropriate water and detergent.

Waste treatment of containers/packagings : See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Section 14: Transport Information (non-mandatory)

Basic shipping description:

In accordance with TDG

Transport hazard class(es) : Flammable Gas.

Labelling



Proper shipping name: TOLUENE

UN number: 1294

Class: 2

Packing group :-

Environmentally hazardous:-

Special precautions for user : -

Section 15: Regulatory Information

Safety , Health and Environmental regulations / legislation specific for the substance or mixture

EU regulations

Major accident hazard: SEVESO III

legislation: FLAMMABLE LIQUIDS.

National legislation

Storage: class 3

Chemical safety assessment: For this product a chemical safety assessment was not carried out.

Section 16: Other information

Further information:-

Issue Date: 2019.11.20

Last revised date: 2020.02.20

Version: 1.1

Editors: HS&E Manager.

Reference:

according to Regulation (EC) No. 1907/2006

DISCLAIMER OF LIABILITY

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.