

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Xylene
Product Description: "xylene (mixed isomers)", C8-H10, , methyltoluene , "methyl toluene", dimethylbenzene, "dimethyl benzene"
Chemical Formula: C₈H₁₀
Recommended Use: A strong solvent for general use in the manufacture of paints, varnishes, lacquers, thinners, inks, rubber, pesticides, herbicides and paint strippers

COMPANY IDENTIFICATION

Supplier: UNION PETROCHEMICAL PUBLIC COMPANY LIMITED
728 Union House Building, Baromratchonnani Rd.,
Bangbumru, Bangplad, Bangkok 10700
Supplier General Contact: +662 881 8288

This (M)SDS is a generic document with no country specific information included.

SECTION 2 HAZARDS IDENTIFICATION

This material is hazardous according to UN GHS Criteria. Classification includes all GHS hazard classes. For hazard categories with two cut-off/concentration limits, classification was based on the higher limit.

GHS CLASSIFICATION:

Acute Toxicity Category 4
Flammable Liquid Category 3
Skin Corrosion/Irritation Category 2

GHS LABEL ELEMENTS:

Pictogram:



Signal Word: WARNING

Hazard Statements:

Physical: H226: Flammable liquid and vapour.
Health: H332: Harmful if inhaled.
H312: Harmful in contact with skin.
H315: Causes skin irritation.

Precautionary Statements:

Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment. P241: Use explosion- proof electrical/ventilating/lighting/ equipment. P242: Use only non- sparking tools .P243: Take precautionary measures against static discharge. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hand thoroughly after handling. P271: Use only outdoors or in a well- ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection.



P312: Call a POISON CENTER or doctor/physician if you feel unwell. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower . P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Response: P403+P235 Store in a well- ventilated place. Keep cool.

Disposal: P501 Dispose of contents/containers in accordance with local regulation.

Other hazard information:

PHYSICAL / CHEMICAL HAZARDS

N/A

HEALTH HAZARDS

N/A

ENVIRONMENTALHAZARDS

N/A

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a substance.

Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
Xylene	1330-20-7		

* This product contains mixed isomers, p-Xylene, m-Xylene, o-Xylene and Ethylbenzene.

SECTION 4 FIRST AID MEASURES

INHALATION

If fumes or combustion products are inhaled remove from contaminated area. If the patient is not breathing spontaneously, administer rescue breathing.

SKIN CONTACT

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available).Seek medical attention in event of irritation.

EYE CONTACT

Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention.

INGESTION

DO NOT induce vomiting. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Seek medical advice.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Foam, Dry chemical, CO₂, water spray or fog – Large fires only.

Inappropriate Extinguishing Media: N/A

FIRE FIGHTING

Fire Fighting Instructions: Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive. Prevent, by any means available, spillage from entering drains or water course. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location.

Hazardous Combustion Products: Carbon monoxide (CO), carbon dioxide (CO₂), other pyrolysis products typical of burning organic material

Protective equipment: Breathing apparatus. Chemical splash suit. Protective gloves.

FLAMMABILITY PROPERTIES

Flash Point : 27°C

Flammable Limits (Approximate volume % in air): LEL:1.1 UEL:7.7

Autoignition Temperature: 495-516°C

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Avoid breathing vapours and contact with skin and eyes.

SPILL MANAGEMENT

Small Spills: Contain and absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.

SECTION 7 HANDLING AND STORAGE

HANDLING

Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid generation of static electricity. DO NOT use plastic buckets. Prevent concentration in hollows and sumps

STORAGE

Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Protect containers against physical damage and check regularly for leaks. No smoking, naked lights, heat or ignition sources. Storage tanks should be above ground and diked to hold entire contents.

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Control parameters/Exposure limits:

Exposure limits/standards (Note: Exposure limits are not additive)

Component Name	Reference	STEL		TWA	
		ppm	mg/m ³	ppm	mg/m ³
Xylene (o, m, p isomers)	ACGIH	150	-	100	-
	Canada-British Columbia OEL	150	-	100	-
Ethylbenzene	ACGIH	125	-	100	-
	Canada-British Columbia OEL	125	-	100	-

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work station location.

PERSONAL PROTECTION

- Respiratory Protection:** Type A* Filter of sufficient capacity. Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.
- Hand Protection:** Wear chemical protective gloves, eg. PVC, Wear safety footwear or safety gumboots, eg. Rubber.
- Eye Protection:** Safety glasses with side shields. Chemical goggles.
- Skin and Body Protection:** PVC protective suit may be required if exposure severe, Chemical splash suit

*A(All classes) = Organic vapours

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

- Physical State:** Liquid
- Color:** N/A
- Odour:** N/A
- Odour Threshold:** N/A

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 20°C): N/A
Density : N/A
Flammability (Solid, Gas): N/A
Flash Point: 27°C

Flammable Limits (Approximate volume % in air): LEL:1.1 UEL :7.7
Autoignition Temperature: 495-516°C
Boiling Point / Range: 138°C - 143°C
Decomposition Temperature: N/A
Vapour Density (Air = 1): 3.66 @ 15 °C
Vapour Pressure: 0.5 kPa @15°C
Evaporation Rate (n-butyl acetate = 1): N/A
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/A
Solubility in Water: Immiscible
Viscosity: N/A
Specific Gravity (water=1) 0.87 @ 15 °C
Volatile Component (%vol) 100

OTHER INFORMATION

Freezing Point: N/A
Melting Point: -48 to -13 °C
Molecular Weight: N/A
Hygroscopic: N/A
Coefficient of Thermal Expansion: N/A

SECTION 10

STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide (CO), carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.

POSSIBILITY OF HAZARDOUS REACTIONS: Reacts violently with strong oxidizing agents.

SECTION 11

TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

<u>Route of Exposure</u>	<u>Conclusion/Remarks</u>
Inhalation	
Toxicity: (Rat) : LC ₅₀ 5000 ppm/4h	
Irritation	The product can cause respiratory irritation and irritation can cause further lung damage. If exposure to highly concentrated vapour atmosphere is prolonged this may lead to narcosis, unconsciousness.
Ingestion	
Toxicity (Rat): LD ₅₀ 4300 mg/kg	



Toxicity (Human): LDLo 50 mg/kg	
Irritation	May cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result
Skin	
Toxicity (Rabbit): LD ₅₀ 1700 mg/kg	.
Irritation	May cause moderate inflammation.
Eye	
Irritation	Can cause severe eye irritation depending on concentration.

IARC Classification:

The following ingredients are cited on the lists below: Group 3

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

MOBILITY IN SOIL

The product is expected to leach with moderate soil mobility.

ECOLOGICAL DATA

Ecotoxicity

Test	Duration	Organism Type	Test Results
Aquatic – Acute Toxicity	96 hour(s)	Oncorhynchus mykiss	LC ₅₀ 13.5 mg/l
Aquatic – Acute Toxicity	24 hour(s)	Palaemonetes pugio	EC ₅₀ 1.4 mg/l

Persistence, Degradability and Bioaccumulation Potential

Persistence and degradability This product is biodegraded in groundwater samples under aerobic conditions and may be degraded under anaerobic denitrifying conditions.

Bioaccumulative potential Product is not expected to significantly bioaccumulate in aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

SECTION 14 TRANSPORT INFORMATION

AIR(DOT):

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
UN Number: 1307
Packing Group: III
Label(s): 3
Transport Document Name XYLENES

ADR/RID(LAND)

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
UN Number: 1307
Packing Group: III
Label(s): 3
Transport Document Name: XYLENES

IMDG:

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
UN Number: 1307
Packing Group: III
Label(s): 3
Marine Pollutant: N/A
Transport Document Name: N/A

AIR(IATA):

Proper Shipping Name: XYLENES
Hazard Class & Division: 3
UN Number: 1307
Packing Group: III
Label(s): 3
Transport Document Name: N/A

SECTION 15

REGULATORY INFORMATION

This material is considered hazardous according to the Classification of Chemicals based on Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

REGULATIONS

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory.

NFPA - USA

Health – 2, Flammability – 3, Reactivity – 0

HMIS - USA

Health – 2, Flammability – 3, Reactivity – 0

European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory.

EU Directives 67/548/EEC

Classification Xn

Symbols



R-Phrases

R10 : Flammable
R20/21 : Harmful by inhalation and in contact with skin
R38 : Irritating to skin.

S-Phrases

S2 : Keep out of the reach of children.
S25 : Avoid contact with eyes.



Canada-WHMIS

This product has a WHMIS classification of B2, D2A and D2B.

SECTION 16	OTHER INFORMATION
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N/A = Not available

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

DOT	Department of Transportation
ADR	European agreement concerning the international carriage of dangerous goods by road.
RID	Regulations concerning the international carriage of dangerous goods by rail.
IMDG-CODE	International maritime dangerous goods code
ICAO	International Civil Aviation Organization
IATA	International air transport association
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
CLP	Classification and Labeling of Packaging
IARC	International Agency for Research on Cancer
NFPA	National Fire Protection Association
HMIS	Hazardous Materials Identification System
OSHA	Occupational Safety and Health Administration
NIOSH	The National Institute for Occupational Safety and Health
ACGIH	American Conference of Industrial Hygienists
WHMIS	Workplace Hazardous Materials Information System

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