บริษัท โมเดอนเคมีเคิล จำกัด (สำนักงานใหญ่) (MODERN CHEMICAL CO.,LTD. (Head Office))
82/80 ซอยเอกมัย 22(นวลน้อย) ถ.สุขุมวิท 63 แขวงคลองตันเหนือ เขตวัฒนา กรุงเทพมหานคร 10110โทร0-2715-0897-9 แฟกซ์.0-2392-3410-3
82/80 Soi Eakmai 22(nuan-noi) 63 Sukhumvit Rd, Klong Ton Nuea, Wattana, Bangkok 10110 E-mail : service@modernchemical.co.th

SAFETY DATA SHEET

XYLENE

1.IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name:	XYLENE
Recommended use:	Chemical for industrial
Manufacturer/Supplier:	**MODERN CHEMICAL CO.,LTD.**
	82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,
	Klong Tan Nuea, Watthana, Bangkok 10110
Telephone No:	0-2715-0897-9, 0-2392-3410-3
Fax No:	0-2715-0908-9, 0-2391-1571-2
Emergency Telephone No:	0-2715-0897-9, 0-2392-3410-3

2. HAZARDS IDENTIFICATION

Label elements

Pictogram

Signal word Danger

Hazard statement(s)

1.) Highly flammable liquid and vapour.

2.) Causes skin irritation.

3.) May be fatal if swallowed and enters airways.

4.) May cause drowsiness or dizziness.

5.) Toxic to aquatic life with long lasting effects.

6.) May damage the unborn child. Suspected of damaging fertility.

Precautionary statement(s)

1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

2.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

3.) Avoid release to the environment.

4.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.

5.) IF IN EYES: Rinse cautiously with water for 15 minutes.

6.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: Dimethylbenzene, Methyl toluene

Ingredients	% (w/w)	CAS NO.
XYLENE	100	1330-20-7

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not berathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.

Skin contact: Remove contaminated clothing and wash affected skin with soap and water. Obtain medical attention. If signs of poisoning appear, treat as for inhalation. Wash contaminated clothing before reuse. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely.

Eye contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

Ingestion: **Do not induce vomiting.** Keep patient warm, In case of shorthess of breath, give oxygen. Apply respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water spray, alcohol – resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from Chemicals:

Vapors may form explosive mixture with air. Flash back possible over considerable distance.

Special protective equipment for fire-fighters:

Wears self contained breathing apparatus for fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Remove all sources of ignition. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

Environmental precautions: Contain or absorb leaking liquid with sand or earth, consults an expert.Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

Methods and Material for Containment and Clean Up:

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silicagel). Prevent liquid entering sewers, basements and workpits; vapor maycreate explosive atmosphere. Transfer to covered steel drums. Disposeof promptly.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

Conditions for Safe Storage & Unsuitable Materials:

Keep tightly closed at room temperature in a dry, cool and well ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible material. Store in original container. Electrical equipment should be protected to the appropriate standard.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: OEL 50 ppm (221 mg/m^3), TWA 25 ppm (109 mg/m^3)

Appropriate Engineering Controls: The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

Individual Protection Measures

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment required when vapor/aerosols are generated. Filter A (acc. To DIN 3181) for vapors of organic compounds.

Hand protection: Handle with gloves. In case full contact wear gloves from viton material, in splash contact wear gloves from nitrile rubber material. The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

Eye protection: Goggles giving complete protection to eyes.

Skin and body protections: Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty work shoes.

Hygiene measures: Ventilation hoods and fans required when working with organic solvents or in hot melt applications. Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colorless , Characteristic	**Evaporation rate :** 63 (n-Bu Acetate = 100)
Melting Point : 30 °C	**Specific gravity :** 0.850-0.889 g/cm^3 at 15.6 °C
pH : N/A	**Solubility in water :** Not Soluble
Boiling point : 135-142 °C	**Viscosity :** < 0.9 mm^2/s at 20 °C
Vapour pressure : 0.8 - 1.2 kPa at 20 °C	**Vapour density (air=1) :** 3.7 g/l
Lower explosive limits : 1 %Vol	**Upper explosive limits :** 7% Vol
Auto-ignition temperature : 527°C	**Flash point:** 27 °C
Odour threshold: 0.27 ppm	**Flammability (solid, gas):** N/A
Decomposition temperature: N/A	**Solubility in other solvents:** Miscible.
n-octanol/water partition coefficient (log P_{ow}): 3.12 -3.2	

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage conditions.

Reactions: Inflammable. Incompatible with light metals, various plastic, rubber. Explosible with air in a vaporous/gaseous state.

Possibility of Hazardous Reactions: No data available

Conditions to avoid: Heat, flames and sparks.

Materials to avoid: Strong oxidizing agent, conc sulfuric acid, nitric acid, uranium hexafluoride, sulfur

Hazardous decomposition products: Carbon monoxide, Carbon dioxides (Hazardous decomposition products from under fire condition.)

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LC50 (inhalation, rat): 28 mg/l/4 h
LD50 (dermal, rabbit): 4350 mg/kg
LD50 (oral, rat): 4000 mg/kg

Sensitization: After inhalation of vapors: Inhalation may lead to the formation of oedemas In the respiratory tract. After skin contact: Slight irritation. Degreasing effect on the skin, possibly followed by secondary inflammation. Danger of skin absorption. After eyes contact: Slight irritation. After swallowing: gastrointestinal symptoms. Risk of aspiration upon vomiting. After long term exposure to the chemical: dermatitis. After absorption of toxic quantities: Systemic effects; headache, drowsiness, dizziness, euphoria, excitation, spasms, in certain circumstances narcosis.

Chronic toxicity: No indication of carcinogenic activity. Mutagenicity; mammal cell test micronucleus negative. Bacterial mutagenicity; Bacillus subtilis is negative.

Further toxicological information: The product should be handled with the care usual dealing with chemicals.

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50 - Onchorhynchus mykiss 8.2mg/l /96h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna 75.5 mg/l/24h

Toxicity to algae	No data available
Toxicity to bacteria	No data available
Biodegradability Remarks:	No data available
Bioaccumulative Potential:	No data available
Mobility:	No data available
Affected in any other way:	No data available

13. DISPOSAL CONSIDERATIONS

Material Disposal: There are no uniform EC Regulations for the disposal of chemicals or residues. Chemicalresidues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Container Disposal: Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. TRANSPORT INFORMATION

ADR/ADNR

UN-No: 1307 Class: 3 Packing group: III

Proper shipping group: XYLENE

IMGD

UN-No: 1307 Class: 3 Packing group: III

EMS: F-E S-D Marine pollutant : No

Proper shipping group: XYLENE

IATA

UN-No: 1307 Class: 3 Packing group: III

Proper shipping group: XYLENE

15. REGULATORY INFORMATION

GHS-Labeling

Hazard statement(s):

H226: Flammable liquid and vapor.

H332: Harmful if inhaled.

H312: Harmful in contact with skin.

H315: Causes skin irritation.

Precautionary statement(s):

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 vapors.

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.

P362: Take off contaminated clothing and wash before reuse.

P363: Wash contaminated clothing before reuse.

P303 + P361 + P353: IF ON SKIN (or hair):Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P302+ P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P370 + P378: In case of fire: Use carbon dioxide, dry chemical or foam for extinction.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P403 + P235: Store in a well-ventilated place. Keep cool. Labelling according to EC Directives

R - phrase(s):

R10 : Flammable

R20/21: Harmful by inhalation and in contact with skin.

R38: Irritating to skin.

S - phrase(s):

S25: Avoid contact with eyes.

16. Other Information

Modern Chemical Co.,Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensive or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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