71. XYLOL (XYLENES)

MATERIAL SAFETY DATA SHEET

1. IDENTITY OF MATERIAL

Product Name : **Xylol (Xylenes)** (User : Mix-Xylene Plant, OM&S, Marketing)		Chemical Designation : **Aromatic Hydrocarbon.**.	
Trade Name : **----**		Synonyms : **Dimethyl Benzene, Xylol, Methyl Toluene.**	
Formula : **C_8H_{10}**	Label : Category Class **: 3**	CAS Number : **1330-20-7**	UN Number : **1307**
Regulated Identification : ---	Shipping Name Codes / Label: **Flammable liquid**		Hazchem Code : **3Y**

2. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : **Liquid.**	Boiling Point in ° C : **137 ^{0}C to 140 ^{0}C**	Vapour Pressure at 21° C : **6.72** mm Hg
Appearance(Colour) : **Colourless.**	Melting / Freezing Point in ° C : ----	Evaporation rate at 30 ° C: ----
Odour : **Sweet.**	Vapor Density (Air-1) : **3.7 (Heavier Than Air)**	Solubility in water at 30 ° C: **Insoluble**
Others (Corrosivety, Etc) : **Flammable**	Specific Gravity (Water-1) : **0.864 at 20° C (Lighter Than Water)**	PH: **Neutral**

3. FIRE AND EXPLOSION HAZARD'S DATA

Explosion / Flammability : Flammable	Flash Point : 26 ^{0} **C** TO 27 ^{0} **C**	Flammability range: **1.1% to 7%**	Autoignition Temperature : **525 ^{0} C**

4. REACTIVE HAZARDS

	Impact :**Stable**	Hazardous Combustion Products : **Carbon Di-Oxide(CO_2), Carbon Monoxide(CO)**
Stability to	Static Discharge : **No**	(Hazardous Decomposition Products) : **----**
	Reactivity : **With Oxidising Material**	(Conditions to avoid) : **Avoid Contact With Oxidising Material**
Hazardous Polymerization	**May Not Occur**	

5. HEALTH HAZARD DATA

Routes of Entry : (**Inhalation, Skin, Mucous Membranes, Eye Contact and Ingestion.**

Effects of Exposure / Symptoms: **Dizziness, Vomiting, Irritation To Eyes & Skin.**

LD 50 (in rat) Orally or percutaneous absorption) (mg / kg body weight) : **3500** mg / kg to **8500** mg / kg

LC 50 (in rat) (mg/1hour) : **----**

Permissible Exposure Limit (PEL) :	ppm **100**	mg /cu. m. **435**	Short Term Exposure Limit(STEL)	ppm **150**	mg /cu. m **655**
Threshold Limit Value(TLV) of ACGIH :	ppm **100**	mg/cu. m **435**	Odour Threshold	ppm **0.05**	mg / cu.m **0.215**

Emergency Treatment : **If Ingested Give Large Amount Of Water & Induce Vomiting. Contact With Eye & Skin: Flush With Pleaty Of Water. Seek Medical Help.**

6. HAZARD SPECIFICATION

NFPA HAZARD SIGNAL	HEALTH: **2**	FLAMMABILITY: **3**	STABILITY: **0**	SPECIAL: **0**

KNOWN HAZARDS

Combustible Liquid : **Yes**	Water Reactive Material **: No**	Irritant **: Yes**
Flammable Material : **Yes**	Oxidiser **: No**	Sensitizer : **No**
Phyrophoric Material : **No**	Organic Peroxide : **No**	Carcinogen : **No**
Explosive Material : **No**	Corrosive Material : **No**	Mutagen **: No**
Unstable Material : **No**	Compressed Gas: **No**	Others (Specify): **No**

7. SAFE USAGE DATA

Ventilation	**General.**
Personal Protective Equipment Required	Eyes (Specify) : **Safety Goggle**
	Respiratory (Specify): **Self Contained Breathing Apparatus Set.**
	Gloves (Specify) : **Chemical Resistant.**
	Clothing (specify) : **Boiler Suit.**
	Others (Specify) : **-----**
Precautions	Handling, Storage & Others (Specify) : **Store In Cool, Ventilated And Specified Place**.

8. EMERGENCY RESPONSE DATA

	Fire Extinguishing Media : **Carbon Dioxide (CO_2), Dry Chemical Powder (DCP), Aqueous Film Forming Foam,Water Spray To Cool Container**
Fire	Special Procedures: **Use Self Contained Breathing Apparatus Set (SCBA Set) During Fire Fighting In Case Of Fires.**
Exposure (Skin and eye contact, inhalation, Ingestion)	First Aid Measures : **If Ingested Give Large Amount Of Water & Induce Vomiting. Contact With Eye & Skin: Flush With Pleaty Of Water. Seek**
Spills	**Medical Aid Immediately.** Steps to be taken:
	Collect In Container ,& Spray The Absorbing Material Like Clay, Sand. Waste disposal method : **On Large Scale Absorb And Landfill , Allow For Atmospheric Evaporation.**

9. FIRST AID MEASURES

Modes of Exposure	Symptoms/Effects	First-aid measures
Inhalation	Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact	Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
Eye Contact	Causes eye irritation. Redness of the eye tissue.	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	May be fatal if swallowed and enters airways.	Do not induce vomiting. Immediately go to OHC or contact doctor/physician.

10. HANDLING AND STORAGE

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No bare lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing vapors, mist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage : Explosion-proof apparatus have to be used. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof

electrical, lighting, ventilating equipment. All efforts should be made to prevent any leaks or spills. Storage tanks should be engineered to prevent contact with water resources, as this material could contaminate the water resources. Surface spills can reach groundwater through porous soil or cracked surfaces. The storage tanks should be monitored regularly for leaks. Where spills or leaks are possible, a comprehensive response plan should be developed and implemented.

Incompatible materials: Strong oxidizing agents. Strong reducing agents. Strong bases. Strong acids.

11. TRANSPORT INFORMATION

Transported in Bulk Tanker of 12 T, 16 T, 18 T Capacities.

12. DISPOSAL CONSIDERATION

In case of spills, collect in container, & Spray the absorbing material like clay, sand.
Waste disposal methods: on large scale absorb and landfill, allow for atmospheric evaporation.

13. ADDITIONAL INFORMATION (DOS & DON'T)

- Incase of leaks monitor %LEL, restrict ignition sources. Stop traffic/vehicular movements and dilute vapor cloud with water spray.
- Look for wind direction.
- Approach from upwind side.
- If caught on downwind, move perpendicular to wind direction and assemble at nearest safe assembly point.
- Cordon off the area.
- Use Self Contained Breathing Apparatus set in case of Fire.
- Contain leaking liquid on sand or earth.
- Do not Panic.
- Do not enter without knowing the wind direction.
- Do not approach leaking / affected area without proper respiratory protection.
- Do not approach from downwind direction
- Do not run.
- Do not move along or opposite to the direction ofwind.
- Do not allow unauthorized personnel.

14. SOURCES USED

Hazardous Chemicals – Richard. J. Lewis.
Data from MSDS of ICMA.

15. MANUFACTURER / SUPPLIER DATA

Firm's Name: **Mangalore Refinery & Petrochemicals**	Emergency Telephone During Transit : (0824) 2270279
Mailing Address: **At P.O Kuthethoor, Mangalore-575030 (D.K.)**	
Telephone Number:(0824)2270279	
TeleFax. Number :**(0824)2271404**	
Contact Persons In Case of Emergency:	
Head (Operations) : TEL: (0824)2882816	
Head-Marketing : TEL: (0824)2882105	
Fire & Safety ,Control Room : TEL: (0824) 2270279, 2882333, 288333	

16. OTHER INFORMATION

Other Information: MRPL advices the users of this product to study this material safety data sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, users should notify their employees, agents and contractors of the information on this MSDS and any product hazards and safety information
Last Revision date: 01-10-2016
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