MATERIAL SAFETY DATA SHEET
(PU THINNER)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

Trade Name : **POLYURETHANE THINNER**

Application : **Expressed in writing Solvent, Transit chemical**

Company Identification : **MAS Paints & Chemicals Industries**
P.O. Box No: 23085,
Dubai, U.A.E

Emergency Telephone No : **00971 – 06 – 5311777**

2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Description : **POLYURETHANE THINNER**

HAZARDOUS INGREDIENTS

CAS Number or other code	Name of the Ingredient	Concentration	Warning symbol R phrases and data on ingred
CAS 1330-20-7	Xylene, mixtures of o--, m- and p-Xylene	20%	Xn R10 R20 / 21
CAS; 110-19-0	ESTER	40%	R38
CAS 8030 – 30 – 6	NAPTHA	40%	F, Xn R11 R20
EINECS	-	-	R20

3. PHYSICAL AND CHEMICAL PROPERTIES

State, Colour and Odour : Colourless liquid with benzene-like characteristic odor
PH : -

Information on changes in the physical state

Boiling point / range	: 136 – 140^{0}C
Melting point / range	: - 34^{0}C
Flash Point	: 22-32^{0}C (c.c.)
Auto flammability	: 435^{0}C
Explosive Limits	: % vol a) lower 1 b) upper 8.1
Vapour pressure	: 7 – 9 hPa (20^{0}C)
Relative density	: 0.86 – 0.88
Solubility a) water	: 250 mg/1
b) fat	: -

Partition coefficient (for ingredients) : n – octanol / water
Log know 3,2 (Xylene)
Log know 3,15 (Ethyl Benzene)

Other information : Very slightly soluble in water, lighter than water, vapour density 3,66 (air = 1), Evaporation rate 0,7 (butyl acetate = 1)

4. HAZARDS IDENTIFICATION

- Flammable, volatile, harmful by inhalation and in contact with skin, irritating to skin.
- The vapour is invisible, heavier than air and spreads along ground.
- Can form explosive mixture with air particularly in empty uncleaned receptacles.
- Heating will cause pressure rise with risk of bursting and subsequent explosion.

5. FIRST AID MEASURES

Special Instructions:

Inhalation:

- Remove to fresh-to-fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention without delay.

Skin:

- Remove contaminated clothing. Wash skin with plenty of water. Obtain medical attention.

Splashes in Eyes:

- Immediately flush eyes with plenty of water and continue washing for 10 – 15 minutes. Obtain medical attention if discomfort persists.

Ingestion:

- Obtain medical attention without delay. Do not induce vomiting.

6. FIRE – FIGHTING MEASURES:

Suitable extinguishing media:

- Use alcohol – type foam, carbon dioxide or dry chemical media.

Special exposure hazards in a fire:

- Burning can produce carbon monoxide and / or carbon dioxide.

Special protective equipment for a fire:

- Use self – contained breathing apparatus and protective clothing.

Other Instructions:

- Use water spray to cool fire – exposed containers.

7. ACCIDENTAL RELEASE MEASURES:

Personal precautions:

- Wear skin and eye protection.
- Wear a half – mask air purifying respirator (filter A2B2 – P3).

Eliminate sources of ignition:

- Environmental Precautions:
- Prevent runoff to sewers or natural waters.

Methods for cleaning up:

- Collect with inert absorbent e.g. with vermiculite in tightly sealable containers.

8. HANDLING AND STOREAGE

Handling:

- Use with adequate ventilation. Keep away from sources of ignition No smoking. Do not get on skin, on clothing, in eyes. Avoid breathing vapour.

Storage:

- Keep containers tightly sealed in a well – ventilated area. Unsuitable material, rubber, suitable material, steel.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Technical measures for exposure controls:

- General room ventilation where this product is handled in closed equipment. Local ventilation where vapours can be expected to escape to the workplace air. Limit values for workplace air:

CAS	1330			
EINECS	215-535-7			
Xylene, mixtures of o -, m – and p – xylene				
HTP	ppm (8h)	100	15min	150 (skin)
	Mg/m3 (8h)	435	15 min	655 (skin)
CAS	100 – 41 – 4			
EINECS	202 – 849 – 4			
Ethyl benzene				
HTP	ppm (8h)	100	10 min	150
	Mg/m3 (8h)	435	15 min	655

Personal protective equipment:

- Special instructions for protection and hygiene.
- Eye bath and safety shower. Wash thoroughly after handling.
- Dry – clean and launder protective clothing before reuse.

Respiratory protection:

- An approved facemask with organic vapour cartridge and dust / mist pre – filter.

Hand Protection:

- Viton

Eye protection:

- Monogoggles or face shield.

Skin protection:

- Overalls, boots and head protection.

10. STABILITY AND REACTIVITY

Conditions to avoid:

- Heat, sparks, open flame, oxidizing conditions.

Materials to avoid:

- Avoid oxidizing agents, concentrated nitric and sulphuric acids and molten sulfur.

Hazardous decomposition products:

- Burning can produce carbon monoxide and / or carbon dioxide.
- Carbon monoxide is toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiate.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

- LD50 = 4300 mg/kg. (Oral, rat)
- LC50 = 5000 ppm (inhalation, rat, 4h)

Irritancy and corrosiveness:

- Moderate irritation affects 500 mg (skin, rabbit, 24h)
- Severe irritation effects 5mg (eyes, rabbit, 24h)

Sensitisation:

Empirical data on effects on humans:

- Irritant effect on skin, eyes and respiratory tract.
- At high vapour concentrations may cause narcosis, loss or consciousness and death.
- At low vapour concentrations cause headache, dizziness and cough.

Other information on health effects:

- LCLo = 10000 ppm (inhalation, man, 6h)
- TCLo - 200 ppm (inhalation, human)
- Irritation effects 200 ppm (eyes, human)

12. ECOLOGICAL INFORMATION:

- Persistence in the environment biodegradation

Bioaccumulation:

- Readily biodegradable (BOD28 60% TOD)

Moderate

- Log kow = 3.2 (xylene), log kow = 3.15 (ethyl benzene)

Mobility

-

Toxic effects on organisms
Aquatic toxicity:
Acute toxicity for fish, moderate
LC50 = 13mg/1 (xylene), LC50 = 4.3 mg/1 (ethyl benzene)
Acute toxicity for algae, moderate
EC50 = 20 mg/1 (xylene)
Acute toxicity for algae, low
EC50 = 438 mg/1 (ethyl benzene)

13. DISPOSAL CONSIDERATIONS

- Waste incineration or special disposal with approval of the responsible local authority.

14. TRANSPORT INFORMATION:

UN Number	1307
Packing category	III
Land transport	
Transport class	3.31c VAK/ADR
Risk code	30
Name according to bill of freight	

Xylene
Other information:
Label 3
Sea Transport
IMDG Class 3.2,3292
Correct technical name xylene (dimethyl benzenes)
Other information
EmS 3 – 07, MFAG 310
Air transport
ICAO / IATA Class 3, UN 1307
Correct technical name xylene (Dimethyl benzenes)

15. REGULATORY INFORMATION

- Information on the warning label
- Letter code of the warning symbol and indications of danger for the preparation.
- Xn, HARMFUL
- Names of the ingredients given on the warning label
- Xylene
- R phrases
- Flammable
- Harmful by inhalation and in contact with skin
- Irritating to skin.
- S phrases
- Avoid contact with eyes.

16. OTHER INFORMATION

Code for the purpose of use

SIC1 : 243 KT1 : 30

SIC2 : 631 KT2 : 36