



MATERIAL SAFETY DATA SHEET

(PU CATALYST)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

Trade Name : PU CATALYST
Application : As Hardener for PU Resin & Paints
Company Identification : MAS Paints & Chemicals Industries
P.O. Box No: 23085,
Dubai, U.A.E
Emergency Telephone No : 00971 – 06 – 5311777
Emergency Fax No : 00971 – 06 - 5311330

2. COMPOSITION AND INFORMATION ON INGREDIENTS:

Description : PU CATALYST

COMPOSITION OF PRODUCT

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification.

25% Ethyl Acetate

N. 67/548/CEE: 607-022-00-5 CAS: 141 – 78 – 6 Einecs: 205-500-4

Xi Irritant

R36 irritating to eyes

R66 Repeated exposure may cause skin dryness or cracking.

R67 vapours may cause drowsiness and dizziness.

0.4% 2,4/2,6 – toluene diisocyanate, mixture of isomers; o-e m-tolylidene diisocyanate

N.67/548/CEE: 615-006-00-4 CAS: 26471-62-5 EINECS: 247-722-4

T+ Very toxic

R26 Very toxic by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Possible risks of irreversible effects.

R42/43 May cause sensitisation by inhalation and skin contact.

R52/53 Harmful to aquatic organisms may cause long – term adverse effects in the aquatic environment.

50% xylene

EINECS 215-535-7 CAS 1330-20-7

Xn R10 R20 R21

3. HAZARDS IDENTIFICATION

- The product easily catches fire if it is exposed to an ignition source.
- The product is harmful following acute exposure to it and poses a serious health threat if inhaled.
- If brought into contact with the eyes, the product causes considerable irritation, which can last for over 24 hours.
- If inhaled, the product may cause sensitisation.
- Repeated exposure to the product may cause skin dryness or cracking.

4. FIRST AID MEASURES

Contact with skin:

- Immediately take off all contaminated clothing/
- Areas of the body that have – or are only even suspected of having – come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Contact with eyes:

- Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. OBTAIN A MEDICAL EXAMINATION.
- Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).
- Swallowing
- Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Inhalation:

- Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well-ventilated area. OBTAIN MEDICAL ATTENTION.

5. FIRE – FIGHTING MEASURE:

Recommended extinguishers:

Extinguishers not to be used.

None in particular

Risks arising from combustion

Avoid inhaling the fumes.

Protective equipment:

Use protection for the respiratory tract.

Cool the containers exposed to the fire with water.

6. ACCIDENTAL RELEASE MEASURE

Measures for personal safety:

Use a mask, gloves and protective clothing.

Environmental measure:

Limit leakages with earth or sand.

Eliminate all unguarded flames and possible sources of ignition. Do not smoke.

If the product has escaped into a watercourse, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning method:

Rapidly recover the product. To do so, wear a mask and protective clothing.

If the product is in a liquid form, stop it from entering the drainage system.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

7. HANDLING AND STORAGE

Handling precautions:

Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.

Do not smoke while working.

Storage conditions:

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from flame and sparks. Avoid accumulating electrostatic charge.

Instructions as regards storage premises.

Cool and adequately ventilated.

Safety electric system.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautionary measure:

Give adequate ventilation to the premises where the product is stored and / or handled.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, e.g. CEN/FFP-S(S) or CEN/FFP-3(S)

Use adequate protective respiratory equipment, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Eye protection.

Use close fitting safety goggles and / or visor conforming to BS 2092 GRADE 1).

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Exposure limit(s) (ACCGIH)

Ethyl acetate

TLV TWA: 1440 mg/m³, 400 ppm

2,4/2,6-toluene diisocyanate, mixture of isomers; o-e m- tolylidene diisocyanate

TLC TWA:0.005 mg/m³ TLV STEL: 0,14 mg/m³, 0.02 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance and colour	: pale yellow liquid
Odour	: solvents
Flash point	: 32°C
Flammable limits	:
Lower (Vol.%)	: 2.2
Upper(Vol.%)	: 11.0
Explosive properties	: 97 mbar @ 20°C
Vapour pressure	: 1.170 kg/I @ 20°C
Viscosity	: 10-15 sec @ 25°C
Solubility in water	: Reacts with water

10. STABILITY AND REACTIVITY

Conditions to avoid:

Avoid accumulating electrostatic charge.

Substances to avoid:

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products:

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

11. TOXICOLOGICAL INFORMATION

The connection of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Set out below is the toxicological information relating to the main substances in the preparation.

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Ethyl acetate

OBSERVATIONS ON HUMAN SUBJECTS:

400 ppm: eye irritant.

Serious toxic effects at 2,000 ppm/60 mins, symptoms of malaise at 800 ppm.

Inhalatory toxicity: TCLo 400 ppm, irritation to nose, eyes and respiratory system.

2,4/2,6 – toluene diisocyanate, mixture of isomers; o-e m-tolyldiene diisocyanate
LD50=6000 mg/kg LC50=610 mg/kg.

12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

13. DISPOSAL CONSIDERATION

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

ROAD (ADR)/RAIL 9RID(

Class: 3 item: 5⁰(b)

Label: 3 Risk identification number: 33

SEA (imdg/imo)

Class: 3.2 packing group: II EmS number: 3 – 05 MFAG number: 310 page
3278

Label: 3

AIR (ICAO/IATA)

Class: 3 packing group: II packing instruction: 305 9passengers) 307 (cargo)

UN number: UN 1866

Proper shipping name: RESIN SOLUTION, flammable

15. REGULATORY INFORMATION

88/379/EEC (Classification and Labelling):

Symbols:

Xn Harmful

F Highly flammable

R Phrases:

R11 Highly flammable

F66 Repeated exposure may cause skin dryness or cracking

R20 Harmful by inhalation.

R36 Irritating to eyes.

R42 May cause sensitisation by inhalation.

S Phrases:

S16 Keep away from sources of ignition – No smoking.

S23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33 Take precautionary measures against static discharges.

S43 In case of fire, use...(indicate in the space the precise type of fire – fighting equipment. If water increases risk, add – ‘Never use water’)

S45 in case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

S36/37 Wear suitable protective clothing and gloves.

Special Provisions:

Contains isocyanates. See information supplied by the manufacturer.

Contents:

2,4/2,6 – toluene diisocyanate, mixture of isomers; o-3 m- tolylidene diisocyanate

Where applicable, refer to the following regulatory provisions:

Directive 82/501/EEC (‘Activities linked to risks of serious accidents’) and subsequent amendments.

16. OTHER INFORMATION

Main bibliographic sources:

ECDIN – Environmental Chemicals Data and Information Network – Joint Research Centre,

Commission of the European communities.

SAX’s DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS –Eight Editions – Van

Nostrand Reinold

ACGIH – Threshold Limit Values – 1997 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Editor : MAS Paints & Chemicals Ind.