

MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 1 of 6

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product : ACRYLINDO 1375-60 Type : Acrylic Polyol Resin

Supplier details:

PT ALKINDO MITRARAYA (AMR)

Jl Gatot Subroto km. 8, Desa Kadu Jaya, Kecamatan Curug

Tangerang 15810 INDONESIA

Phone : +62 - 21 - 59302250 (hunting 10 lines)

Facsimile : +62-21-59302251Email : alkindo@alkindo.netWebsite : www.alkindo.net

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Flammable Liquid Hazard Category 3

Acute Toxicity (Dermal) Hazard Category 4

Acute Toxicity (Inhalation) Hazard Category 4

Chronic Aquatic Hazard Category 4

Skin Corrosion / Irritation Hazard Category 2

Serious Eye Damage / Eye Irritation Hazard Category 2A

Carcinogenicity Hazard Category 2

Target Organ Systemic Toxicant (TOST) - Single Exposure Hazard Category 3

Toxic To Reproduction Hazard Category 2

GHS LABELING



GHS SIGNAL WORD

Danger

HAZARD STATEMENTS

Flammable liquid and vapour

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

Harmful in contact with skin

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause drowsiness and dizziness



MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 2 of 6

PRECAUTIONARY STATEMENTS

Prevention

Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only nonsparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors or spray mist. Wear protective gloves/clothing and eye/face protection.

Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTRE or doctor/physician if you feel unwell. Specific measures - refer to supplemental first aid instructions. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell. Specific treatment - refer to supplemental first aid instructions. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: 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. IF exposed or concerned: Get medical advice/attention. In case of fire, use the following media for extinction: water spray or fog, alcohol foam, carbon dioxide, dry chemical.

Storage

Store in well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

Disposal

Dispose of contents/container in accordance with local and national regulations.

3. COMPOSITION INFORMATION

CHEMICAL DESCRIPTION

Acrylic polyol resin, in solution in butyl acetate.

HAZARDOUS COMPONENTS

Butyl Acetate CAS No. 1330-20-7 49 – 51 %

4. FIRST AID MEASURES

EYE CONTACT:

In the event of contact with eyes, irrigate copiously with water for at least ten minutes, obtain medical advice immediately if irritation persists or there is any sign of tissue damage.

SKIN CONTACT:

Remove contaminated clothing. In the event of contact with the skin, remove excess resin with a clean cloth; clean skin with water (or soap and water). If irritation persists or if any sign of tissue damage is apparent, obtain medical advice immediately.

INHALATION:

In the event of excessive inhalation remove the individual to fresh air and keep at rest; obtain medical advice immediately.

INGESTION:

In the event of accidental ingestion, rinse mouth with water; give up to 1 tumbler (½ pint) of milk or water to drink; obtain medical advice immediately.

MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 3 of 6

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Foam, dry powder, carbon dioxide, water spray.

EXPOSURE HAZARDS:

Keep containers cool by spraying with water if exposed to fire. Heating will cause pressure rise with risk of bursting and subsequent explosion. For decomposition products see Section 10.

PROTECTIVE EQUIPMENT:

Fire fighters and others exposed, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Use personal protection recommended in Section 8. Avoid breathing vapor from hot material.

ENVIRONMENTAL PRECAUTIONS:

Do not allow to enter drains and water courses. If sewers become contaminated contact Local Water Authority and Police. Should resin enter other waterways inform the Environment Agency.

METHODS FOR CLEANING UP:

Absorb onto sand. Drums leaking near base may be inverted. For disposal see Section 13.

7. HANDLING & STORAGE

HANDLING:

Handle in a well-ventilated area. Keep concentration of vapors as low as is reasonably practicable and observe occupational exposure limits detailed in Section 8.

STORAGE:

Store in closed containers away from sources of heat in a well-ventilated flameproof area. Storage temperature: 25 -30°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES:

Ensure adequate ventilation to keep vapor concentrations below occupational exposure limits.

OCCUPATIONAL EXPOSURE LIMITS (EH40):

Butyl Acetate

150 ppm – 15 min. ref period – Sk*

*Sk – can be absorbed through the skin.

ENGINEERING MEASURES:

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

RESPIRATORY PROTECTION:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

EYE PROTECTION:

Wear eye/face protection such as chemical splash proof goggles or face shield.



MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 4 of 6

SKIN PROTECTION:

Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Since this product is absorbed through the skin, care must be taken to prevent skin contact and contamination of clothing.

ADDITIONAL ADVICE:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

9. PHYSICAL & CHEMICAL PROPERTIES

Phase : Liquid (25.0 °C) Appearance, Color : Transparent

Odor : Thinner / Solvent – like

Boiling point (760 mmHg) : 110 - 130°C Water solubility : insoluble

Flash point (°C) : 30.0 (Tag close cup)

10. STABILITY & REACTIVITY

CONDITIONS TO AVOID:

Heating will cause pressure rise with risk of bursting and subsequent explosion.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition products may include carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

LABORATORY DATA:

Acrylic polyol resin

This product has not been tested for toxicity. It is classified as sensitizing under 88/379/EEC and subsequent amendments.

HAZARDOUS INGREDIENTS TOXICITY:

Butyl Acetate.

The vapour is irritating to the nose, throat and lungs and may cause coughing, nausea, dizziness, headache and unconsciousness. The liquid is irritating to the eyes and skin and may be absorbed through the skin. Accidental ingestion may cause vomiting, nausea, dizziness, headache and unconsciousness.

12. ECOLOGICAL INFORMATION

ASSESSMENT:

If properly handled, this material should not present a serious environmental hazard.

TEST RESULTS:

AMR has not conducted environmental studies on this product. The product does not contain any substance that is classified under EC legislation for environmental effects. Data is available on some of the components.

Butyl Acetate

 $\begin{array}{lll} LD_{50} \ (inhalation) \ Rat \ 2000 \ ppm/411 \\ LD_{50} \ (oral) & Rat \ 14000 \ mg/kg \\ \underline{BOD}5 > & 0.5 \ Readily \ biodegradable \\ COD \end{array}$

* LC₅₀, LD₅₀ vary markedly between species. Lowest value is shown above



MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 5 of 6

13. DISPOSAL CONSIDERATIONS

METHODS OF DISPOSAL; WASTE OF RESIDUES; CONTAMINATED PACKAGING

Control incineration.

Emptied drums contain solvent vapors, hazardous in respect of fire, explosion and noxiousness.

Disposal only to licensed drum reconditioners.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name : Resin solution

UNDG Class : 3 UN No : 1866 Packing Group : III:

Transport label required : Flammable liquid

HAZCHEM Code :3[Y]

Sea Transport (IMO)

Proper Shipping Name : Resin solution

: 3 **IMDG Class** : UN1866 **UN Number** $: \mathrm{III}$ Packing Group

Transport label required : Flammable liquid

Air Transport (ICAO/IATA)

Proper Shipping Name : Resin solution

Hazard Class : 3 Packing Group : III UN : UN1866

Transport Label Required: Flammable liquid

Packing Instruction/Maximum Net Quantity Per Package:

Passenger Aircraft : 309; 60L

15. REGULATORY INFORMATION

European Union (EU): All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

China: All components of this product are included on the Chinese Inventory or are not required to be listed on the Chinese Inventory.

Japan: All components of this product are included on the Japanese (ENCS) Inventory or are not required to be listed on the Japanese Inventory.

OTHER INFORMATION

RISK PHRASES:

R10 Flammable

R20/21 Harmful by inhalation & in contact with skin

R38 Irritating to skin

SAFETY PHRASES:

S24/25 Avoid contact with skin and eyes

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



MSDS Number : CMSD-134

Version Date : November 25, 2010

Page 6 of 6

Advice.

Wear suitable gloves.

Use only in well ventilated areas.

16. OTHER INFORMATION

Whilst every care has been taken in the preparation of this material safety data sheet, the same has been produced from information and data currently available to PT Alkindo Mitraraya at the date hereof; however, PT Alkindo Mitraraya cannot be responsible for any errors or omissions. If in any doubt, please consult PT Alkindo Mitraraya.

Reasons for issue: New Format.

Print date 17.02.2009