

MSDS Number : LMSD-034

Version Date : November 22, 2010

Page 1 of 6

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product : ALKINDO 3404-70 Type : Short Oil Alkyd 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 : +62-21-59302251Website : www.alkindo.net : alkindo@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 : LMSD-034

Version Date : November 22, 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

Short oil alkyd resin – based on mixed fatty acid, in solution in butyl acetate.

HAZARDOUS COMPONENTS

Butyl Acetate CAS No. 1330-20-7 29 - 31 %

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 : LMSD-034

Version Date : November 22, 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. Where exposure level is known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

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. Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

7. HANDLING & STORAGE

HANDLING:

Handle in a well-ventilated flameproof area preferably in an enclosed system. 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. Store in original containers in approved flammable liquid storage area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Keep containers securely sealed. Store away from incompatible materials in a cool, dry, well-ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

Storage temperature : store at 0 - 25°C.

Reason: Quality

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

EYES:

Goggles.

MSDS Number : LMSD-034

Version Date : November 22, 2010

Page 4 of 6

RESPIRATORY PROTECTION:

Wear suitable respiratory protection if exposure limits may be exceeded. Airline respirator or cartridge respirator with appropriate filter.

HAND PROTECTION:

Wear impermeable gloves.

SKIN PROTECTION:

Wear suitable protective clothing.

9. PHYSICAL & CHEMICAL PROPERTIES

Phase : Liquid (25.0 °C)
Appearance, Color : Transparent, yellowish
Odor : Thinner / Solvent – like

Boiling point (760 mmHg) : 140 - 150°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:

Short oil alkyd resin solution

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

BOD5 > 0.5 Readily biodegradable

COD



MSDS Number : LMSD-034

Version Date : November 22, 2010

Page 5 of 6

13. DISPOSAL CONSIDERATIONS

AMR encourages the recycle, recovery, and reuse of materials, where permitted. If disposal is necessary, AMR recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

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

IMDG Class : 3 UN Number : UN1866 Packing Group : III

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 Cargo Aircraft : 310; 220L

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

R65 Harmful; may cause lung damage if swallowed



MSDS Number : LMSD-034

Version Date : November 22, 2010

Page 6 of 6

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 advice.

Wear suitable gloves.

S43 In case of fire use sand, foam, dry powder or carbon dioxide extinguisher.

S51 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.