SAFETY DATA SHEET
POLIMALL YELLOW

1. IDENTIFICATION
PRODUCT NAME : POLIMALL YELLOW

COMPANY IDENTIFICATION
Name of manufacture : KOYO-SHA CO., LTD.
Address : No. 1, AZA-SHIIOZAWA, TAISHIN-NAKASHINJO, SHIRAKAWA-SHI,
FUKUSHIMA-KEN 969-0307 JAPAN
Name of section : QUALITY ASSURANCE SECTION OF TECHNICAL DEVELOPMENT DIVISION
Reference No. : 1541YL

2. HAZARDS IDENTIFICATION
GHS CLASSIFICATION

PHYSICAL HAZARDS
Explosives : Not applicable
Flammable gases : Not applicable
Flammable aerosols : Not applicable
Oxidizing gases : Not applicable
Gases under pressure : Not applicable
Flammable liquids : Not applicable
Flammable solids : Classification not possible
Self-reactive substances and mixtures : Not applicable
Pyrophoric liquids : Not applicable
Pyrophoric solids : Not classified
Self-heating substances and mixtures : Classification not possible
Substances and mixtures which, in contact with water, emit flammable gases :
Oxidizing liquids : Not applicable
Oxidizing solids : Classification not possible
Organic peroxides : Classification not possible
Corrosive to metals : Classification not possible

HEALTH HAZARDS
Acute toxicity - oral : Classification not possible
Acute toxicity - skin : Classification not possible
Acute toxicity - inhalation: gas : Not applicable
Acute toxicity - inhalation: vapour : Classification not possible
Acute toxicity - inhalation: dust : Classification not possible
Acute toxicity - inhalation: mist : Not applicable
Skin corrosion/irritation : Classification not possible
Serious eye damage/eye irritation : Classification not possible
Respiratory sensitization : Classification not possible
Skin sensitization : Category 1
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Reproductive toxicity : Classification not possible
Specific target organ systemic toxicity Category 3 - Respiratory tract irritation
- Single exposure :
Specific target organ systemic toxicity Category 1 - Lung, Central nervous system
- Repeated exposure :
ENVIRONMENTAL HAZARDS

- Aspiration hazard: Classification not possible
- Hazardous to the aquatic environment: Classification not possible
  - acute:
  - Hazardous to the aquatic environment: Classification not possible
  - chronic:
  - Hazardous to the ozone layer: Classification not possible

GHS LABEL ELEMENTS

PICTOGRAMS/SYMBOLS:

SIGNAL WORD: DANGER

HAZARD STATEMENTS:

May cause an allergic skin reaction
May cause respiratory irritation
Causes damage to lung, central nervous system through prolonged or repeated exposure

PRECAUTIONARY STATEMENTS

Prevention:
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in well-ventilated area.
- Do not breathe dust.
- Wear protective eyeglasses as needed.
- Wear respiratory protection/face protection/protective gloves/goggles and clothing.
- Wash hands thoroughly after handling.

Response:
- If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If you feel unwell, get medical attention.

Storage:
- Store in a well-ventilated and cool place.

Disposal:
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Dispose of cleaning solution after making harmless.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/Mixture</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>CAS No.</td>
</tr>
<tr>
<td>Cotton cloth</td>
<td>No data</td>
</tr>
<tr>
<td>Aluminium oxide (Al₂O₃)</td>
<td>1344-28-1</td>
</tr>
<tr>
<td>Mineral oil</td>
<td>8042-47-5</td>
</tr>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
</tr>
</tbody>
</table>

Contains fatty acids and others.

4. FIRST-AID MEASURES

Inhalation:
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If you feel unwell, get medical attention.

Skin contact:
- Remove/take off immediately all contaminated clothing.
- Rinse skin immediately with water/shower.
- Wash contaminated clothing before reuse.

Eye contact:
- Rinse cautiously with water for several minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- Get medical attention/advice.

Ingestion:
- Rinse mouse immediately with water. Call a doctor immediately.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: In case of initial fires, use fire-extinguishing powder/foam, carbon dioxide or dry sand. In case of larger fires, asphyxiating a fire using fire-fighting foam and others is effective.

Unsuitable extinguishing media: Using water may be dangerous to spread fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Evacuate nonessential personnel. Authorized personnel only. Wear proper protective equipment (gloves/goggles/clothing and high boots).

Environmental precautions:
Caution do not to discharge into rivers or seas.

Method and materials for contaminant and cleaning up:
Collect spilled material into empty containers.

7. HANDLING AND STORAGE

HANDLING

Technical measure:
According to "8. EXPOSURE CONTROLS/PERSONAL PROTECTION", put facility measures into operation and wear protective equipment.

Local-ventilation/Whole ventilation:
According to "8. EXPOSURE CONTROLS/PERSONAL PROTECTION", put facility measures into operation (Local-ventilation/Whole ventilation).

Note:
Use only outdoors or in well-ventilated area. Do not contact/breathe/swallow. Do not breathe powder dust. Wash hands thoroughly after handling.

STORAGE

Technical measure:
Install the equipment of lighting, ventilation and necessary daylighting to handle.

Incompatible substances:
Reference to "10. STABILITY AND REACTIVITY".

Storage conditions:
Keep away from high heat and store in a well ventilated place. Keep cool.

Packaging materials:
Use a break-proof package.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Facility measures:
Ventilate to avoid inhalation of dust.

Personal protective equipment
Respiratory protection:
Wear appropriate respiratory protective equipment, dust-proof mask and others.

Hand protection:
Wear appropriate protective gloves, leather gloves and others.

Eye protection:
Wear protective glasses (ordinary glasses type/goggle type and others).

Skin and body protection:
Wear protective clothing and safety shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:
Pale yellow cloth

Odor:
Slight odor

pH:
No data

Melting point/freezing point:
No data

Initial boiling point and boiling range:
No data

Flash point:
No data

Explosion limit:
No data

Vapour pressure:
No data

Vapour density:
No data

Relative density:
No data
Solubility: Soluble in water only auxiliary agent
Partition coefficient: n-octanol/water: No data
Auto-ignition temperature: No data
Decomposition temperature: No data

10. STABILITY AND REACTIVITY
Stability/Reactivity: Stable under normal condition (room temperature).
Possibility of hazardous reactions: Almost never
Condition to be avoided: Fire, direct sunlight.
Incompatible materials: Do not store together with acid/alkaline materials.
Hazardous decomposition products: Nothing

11. TOXICOLOGICAL INFORMATION
Acute toxicity:
- Aluminium oxide $\text{LD}_{50} > 5000$ mg/kg (rat, oral) $^1$
- Mineral oil $\text{LD}_{50} > 5000$ mg/kg (estimated value) $^1$
- Rosin $\text{LD}_{50} 7800$ mg/kg (rat, oral) $^2$
- Rosin $\text{LD}_{50} > 2500$ mg/kg (rabbit, skin) $^2$
- Rosin $2.3$ mg/L (rat, inhalation: dust) $^2$
- Triethanolamine $\text{LD}_{50} 4200$-$11300$ mg/kg (rat, oral) $^3$
- Triethanolamine $\text{LD}_{50} 4190$ mg/kg (rabbit, skin) $^3$
- Fatty acids $\text{LD}_{50} 4640$ mg/kg (rat)

Skin corrosion/irritation: No data
Serious eye damage/eye irritation: No data
Respiratory sensitization: No data
Skin sensitization: Rosin may cause an allergic skin reaction $^4$-$^5$. There is a report of positive results in a guinea pig maximization test. There are case reports of allergic contact dermatitis in humans attributed to the substance or products containing the substance. The substance was classified into R43 in EU classification, therefore, Rosin was classified into Category 1 $^6$.
Triethanolamine is classified as Category 1 to cause allergic dermatitis by contact $^3$.
This product was classified into Category 1.

Germ cell mutagenicity: No data
Carcinogenicity: No data
Reproductive toxicity: No data
Specific target organ systemic toxicity - Single exposure:
- Aluminium oxide is classified into Category 3 (Respiratory tract irritation) based on enrollment “upper respiratory tract irritation” $^7$.
This product was classified into Category 3.
Specific target organ systemic toxicity - Repeated exposure:
- Aluminium oxide was classified into Category 1 according the statement that by occupational exposure of aluminas, pulmonary fibrosis was occurred (Category 1) $^8$.
- Aluminium oxide is classified as Category 1 (Inhalation; Central nervous system) based on enrollment “Aluminium oxide have the potential to impact the central nervous system” $^7$.
This product was classified into Category 1.

Aspiration hazard: No data

12. ECOLOGICAL INFORMATION
Ecotoxicity: No data
Persistence/Degradability: No data
Bioaccumulation potential: No data
Mobility in soil: No data
Hazard to the ozone layer: No data

13. DISPOSAL CONSIDERATIONS
The remainder waste: In case of the disposal, comply with local government codes and related regulations.
Contaminated container and packing: Recycle containers after washing, or dispose according to local government codes and related regulations.
   In case of disposal of the container, remove the content.

14. TRANSPORT INFORMATION
International regulations: Not applicable with IMDG Code and IATA Dangerous Goods Regulations.
Safety measure and condition for transport: Check the container for damage, corrode and leak before transport.
Load the cargo without fall, drop and damage. Prevent the cargo from unpiling for sure. Handle the shipping case with care and do not make an impact. Do not handle shipping case roughly, for example, collision, drag, etc.

15. REGULATORY INFORMATION
Aluminium oxide: Industrial Safety and Health Act;
   Notifiable hazardous substance, 189 Aluminium oxide
   (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appendixed Table 9)
Mineral oil: Industrial Safety and Health Act;
   Notifiable hazardous substance, 168 Mineral oil
   (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appendixed Table 9)
Rosin: Industrial Safety and Health Act;
   Notifiable hazardous substance, 632 Rosin
   (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appendixed Table 9)
Triethanolamine: Industrial Safety and Health Act;
   Notifiable hazardous substance, 381 Triethanolamine
   (Paragraph 2, Article 57. Paragraph 2, Article 18 of the Order for Enforcement, The Appendixed Table 9)
Other regulations for foreign countries: Regulations in “SDS” are Japanese ones.
   Regulatory information with regards to this preparation in your country or region should be examined by your own responsibility.

16. OTHER INFORMATION
REFERENCES:
1) IUCLID (2000)
2) Akzo Coatings Inc. “Refind Gum Rosin” MATERIAL SAFETY DATA (1990)
3) Safety Data Sheet (each raw material manufacturer)
5) 1999 TLV and BEIs (ACGIH)
6) Japan Industrial Safety & Health association (JISHA), Japan Advanced Information center of Safety and Health
7) ICSC (2000)
8) EHC (1997)

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