DIMETHYLALUMINUMHYDRIDE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY.

Product Name
Dimethylaluminumhydride
Formula
(CH3)2AlH
Company Identification
See footer.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation
Dimethylaluminumhydride
Components/Impurities
None
EC No.
Not available.
CAS No.
865-37-2

3. HAZARDS IDENTIFICATION

Pyrophoric liquid, decomposes violently in water. Skin contact can cause severe burns. Fumes may cause skin and eye irritation. Avoid inhalation of fumes.

4. FIRST AID MEASURES

Prompt medical attention is required in all cases of exposure to Dimethylaluminumhydride and its by-products. Rescue personnel should be equipped with appropriate protective equipment (e.g. Self-contained breathing apparatus) to prevent unnecessary exposure and must be aware of the fire and explosion potential of Dimethylaluminumhydride

Skin
Contact may cause severe burns. Fumes may cause irritation. Immediately flush affected areas with large quantities of water. Remove affected clothing as rapidly as possible if not stuck to skin.

Eyes
Contact may cause severe burns. Fumes may cause irritation. Persons with potential exposure to Dimethylaluminumhydride should not wear contact lenses. Flush contaminated eyes with large quantities of water for at least 15 minutes. Hold eyelids open to ensure complete flushing.

Inhalation
May cause irritation. Move exposed personnel to an uncontaminated area quickly using self-contained breathing apparatus. If breathing is difficult, give oxygen. If breathing has stopped, apply artificial respiration. Medical assistance should be sought immediately. Keep victim warm and quiet.

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Always use dry powder, soda ash or lime. Never use water, foam or halogenated compounds to fight fires involving organometallic materials. Without risk, stop flow of this compound to the fire. Without risk, and if safe to do so, move container(s) away from fire area.

Exposure Hazards
In a controlled fire any unreacted Dimethylaluminumhydride may reignite when contact with air or water is renewed.

Special Protective Equipment for Fire-Fighters
Fire resistant clothing, self-contained breathing apparatus, face shield and safety goggles, safety shoes and fire resistant gloves.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Evacuate area. Use appropriate protective equipment. Purge equipment with inert gas before attempting repairs. Ensure adequate ventilation. If leak is in container call one of the emergency numbers as appropriate (See footer).

Environmental Precautions
Try to stop release, if safe to do so. For fire-fighting measures see Section 5.

Clean up methods
Contact Epichem for specific advice.

7. HANDLING AND STORAGE

Handling
Valve outlet seals must remain in place unless container is secured and valve outlet piped to use point. Use a check valve or trap to prevent hazardous back flow into the container. Any equipment used for Dimethylaluminumhydride service must be thoroughly cleaned and prepared to eliminate contamination and must be maintained in a leak-free state. All air and moisture in the system must be eliminated before use.

Storage
Protect containers from physical damage. Do not allow temperatures to exceed (125°F) 51°C. Store away from flammable material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls
OSHA or ACGIH:

TLV= 2 mg/m³ (aluminum alkyls)
TLV(aluminum oxide)= 10 mg/m³
PEL(aluminum oxide)= 15 mg/m³ (ttl dust)
PEL(aluminum oxide)= 5 mg/m³ (resp. frac.)
OES and MEL: Long term exposure limit aluminum alkyls:
2mg/m³ (8-hour TWA reference period).
Long term exposure limit aluminum oxides:
(8-hour TWA reference period)
Total inhalable dust 10mg/m³
Respirable dust 5mg/m³
Ensure adequate ventilation.

Personal Protection
Self-contained breathing apparatus, fire resistant gloves, face shield and safety goggles, safety shoes, fire-resistant garments. Safety shower and eyewash.
SAFETY NOTICE: In Order to provide our customers with the highest quality material and maintain our high standards of safety, the surface temperature of the bubbler will be monitored during the transportation of our products. We would like to monitor the surface temperature of the bubbler using a tempilabel. Tempilabel is a temperature-monitoring strip ranging from 120F to 150F (49C to 66C) which will indicate the temperature during shipment. If the temperature monitor is changed, please notify an Epichem representative immediately and we will assist you in the proper measures to be taken. We ask for your cooperation in our efforts of quality assurance and safety. If you have any questions or comments, please contact an Epichem representative. We thank you for your cooperation.

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