1. CORRECTIVE RESPONSE ACTIONS

1.1 Personal Protective Equipment: Rubberized gloves; full face shield.
1.2 Symptoms Following Exposure: Contact of solid with skin and eyes causes severe burns similar to those caused by caustic soda.
1.3 Treatment of Exposure: In case of accidental contact with the skin, wash off excess with a dry paper towel. Wash the affected area with a large volume of water to prevent localized heating of the skin.
1.4 TLV-TWA: Not listed.
1.5 TLV-STEL: Not listed.
1.6 TLV-Ceiling: Not listed.
1.7 Toxicity by Ingestion: Currently not available.
1.8 Chronic Toxicity: Currently not available.
1.9 10 Vapor (Gas) Irritants: Currently not available.
1.10 Respiratory Irritants: Currently not available.
1.11 Skin Irritants: Currently not available.
1.12 Odor Threshold: Odorless.
1.13 IDLH Value: Not listed.
1.14 OSHA PEL-TWA: Not listed.
1.15 OSHA PEL-STEL: Not listed.
1.16 OSHA PEL-Ceiling: Not listed.
1.17 ACGIH TLV: Not listed.

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.
2.2 Formula: LiAlH4
2.3 IMO UN Designation: 4.3A/1405
2.4 DOT ID No.: 7440
2.5 CAS Registry No.: 138-40-3
2.6 NACRO Guide No.: 196
2.7 Standard Industrial Trade Classification: 52495

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: Rubberized gloves; full face shield.
3.2 Symptoms Following Exposure: Contact of solid with skin and eyes causes severe burns similar to those caused by caustic soda.
3.3 Treatment of Exposure: In case of accidental contact with the skin, wash off excess with a dry paper towel. Wash the affected area with a large volume of water to prevent localized heating of the skin.
3.4 TLV-TWA: Not listed.
3.5 TLV-STEL: Not listed.
3.6 TLV-Ceiling: Not listed.
3.7 Toxicity by Ingestion: Currently not available.
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: Currently not available.
3.10 Vapor (Gas) Irritant: Not listed.
3.11 Skin Irritant: Not listed.
3.12 Odor Threshold: Odorless.
3.13 IDLH Value: Not listed.
3.14 OSHA PEL-TWA: Not listed.
3.15 OSHA PEL-STEL: Not listed.
3.16 OSHA PEL-Ceiling: Not listed.
3.17 ACGIH TLV: Not listed.

4. FIRE HAZARDS

4.1 Flash Point: Flammable Solid
4.2 Flammable Limits in Air: Not pertinent
4.3 Fire Extinguishing Agents: Powdered graphite, powdered salt, or powdered limestone
4.4 Fire Extinguishing Agents Not to Be Used: Do NOT use water, soda acid, carbon dioxide or dry chemical.
4.5 Special Hazards of Combustion: Products: Currently not available
4.6 Behavior in Fire: Decomposes at 275°F to form hydrogen gas. The heat generated may cause ignition and/or explosion.
4.7 Auto Ignition Temperature: Currently not available
4.8 Electrical Hazards: Class 1, Group B
4.9 Burning Rate: Not pertinent
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichiometric Air to Fuel Ratio: 9.5
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): 3.0 (calc.)
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: Reacts violently with water as a dry solid or when dissolved in ether. The hydrogen produced by the reaction with water is a major hazard and necessitates adequate ventilation.
5.2 Reactivity with Common Materials: Can burn in humid air or moist air.
5.3 Stability During Transport: Normally stable, unstable at high temperatures.
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent
5.5 Polymerization: Not pertinent
5.6 Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION

6.1 Aquatic Toxicity: Currently not available
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): Currently not available
6.4 Fish Concentration Potential: None
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: 95-98%
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: Dry air
7.4 Venting: Store container in well-ventilated area.
7.5 IMO Pollution Category: Currently not available
7.6 Ship Type: Currently not available
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Dangerous When Wet
8.2 49 CFR Class: 4.3
8.3 49 CFR Package Group: I
8.4 Marine Pollutant: Not pertinent
8.5 NFPA Hazard Classification: Category Classification
8.6 EPA Reportable Quantity: Not listed
8.7 EPA Pollution Category: Not listed
8.8 RCRW Waste Number: Not listed
8.9 EPA FWPCA List: Not listed

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15°C and 1 atm: Solid
9.2 Molecular Weight: 37.94
9.3 Boiling Point at 1 atm: Decomposes
9.4 Freezing Point: Not pertinent
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Specific Gravity: 0.917 at 15°C (solid)
9.8 Liquid Surface Tension: Not pertinent
9.9 Liquid Water Interfacial Tension: Not pertinent
9.10 Vapor (Gas) Specific Gravity: Not pertinent
9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
9.12 Latent Heat of Vaporization: Not pertinent
9.13 Heat of Combustion: Not pertinent
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Not pertinent
9.16 Heat of Polymerization: Not pertinent
9.17 Heat of Fusion: Currently not available
9.18 Limiting Value: Currently not available
9.19 Reid Vapor Pressure: Currently not available

NOTES

9.19 4.31 Odor Threshold: Not pertinent
9.20 IDLH Value: Not listed
9.21 OSHA PEL-TWA: Not listed
9.22 OSHA PEL-STEL: Not listed
9.23 OSHA PEL-Ceiling: Not listed
9.24 ACGIH TLV: Not listed

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