Section 1 - Product and Company Information

Product Name
ALANE-N-METHYLPYRROLIDINE COMPLEX, ELECTRONIC GRADE

Product Number
597880

Brand
ALDRICH

Company
Sigma-Aldrich

Address
3050 Spruce Street
SAINT LOUIS MO 63103 US

Technical Phone:
800-325-5832

Fax:
800-325-5052

Emergency Phone:
314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name
ALANE-N-METHYLPYRROLIDINE

CAS #
126084-10-4

SARA 313
No

Formula
C5H14AlN

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

HMIS RATING
HEALTH: 4
FLAMMABILITY: 4
REACTIVITY: 4

NFPA RATING
HEALTH: 4
FLAMMABILITY: 4
REACTIVITY: 4

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

**EYE EXPOSURE**
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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**Section 5 - Fire Fighting Measures**

**FLAMMABLE HAZARDS**
Flammable Hazards: Yes
Pyrophoric/Autoignition: Yes

**CONDITIONS OF FLAMMABILITY**
Catches fire if exposed to air.

**FLASH POINT**
N/A

**AUTOIGNITION TEMP**
N/A

**FLAMMABILITY**
N/A

**EXTINGUISHING MEDIA**
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam. Carbon dioxide, dry chemical powder, or appropriate foam.
Unsuitable: Do not use water.

**FIREFIGHTING**
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Pyrophoric material. Emits toxic fumes under fire conditions.

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**Section 6 - Accidental Release Measures**

**PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL**
Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

**PROCEDURE(S) OF PERSONAL PRECAUTION(S)**
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

**METHODS FOR CLEANING UP**
Avoid raising dust. Cover with dry-lime, sand, or soda ash.
Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

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**Section 7 - Handling and Storage**

**HANDLING**
User Exposure: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Avoid prolonged or repeated exposure.
STORAGE
Suitable: Keep container closed. Keep away from heat, sparks, and open flame. Store at: 0-4°C
Store at 2-8°C

SPECIAL REQUIREMENTS
Air and moisture sensitive. Handle and store under nitrogen.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Safety shower and eye bath. Use nonsparking tools. Use only in a chemical fume hood.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.
Other: Faceshield (8-inch minimum).

GENERAL HYGIENE MEASURES
Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value At Temperature or Pressure</th>
</tr>
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<tbody>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<td>BP/BP Range</td>
<td>40,000. - 45,000 °C.0,100 mmHg</td>
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<tr>
<td>MP/MP Range</td>
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<td>Freezing Point</td>
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<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<td>Bulk Density</td>
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<td>Odor Threshold</td>
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<td>Volatile%</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<td>Partition Coefficient</td>
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<td>Decomposition Temp.</td>
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<td>Flash Point</td>
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<td>Autoignition Temp.</td>
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<tr>
<td>Refractive Index</td>
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</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

STABILITY
Stable: Unstable.
Conditions to Avoid: Catches fire if exposed to air. Do not allow water to enter container because of violent reaction.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Aluminum oxide.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: Causes burns.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes burns.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: Organometallic substance, solid, pyrophoric
UN#: 3391
Class: 4.2
Packing Group: Packing Group I
Hazard Label: Spontaneously combustible
PIH: Not PIH

IATA
Proper Shipping Name: Organometallic substance, solid, pyrophoric
IATA UN Number: 3391
Hazard Class: 4.2
Packing Group: I

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
Symbol of Danger: F-C
R: 14/15-17-22-34
Risk Statements: Reacts violently with water, liberating extremely flammable gases. Spontaneously flammable in air.
Harmful if swallowed. Causes burns.
S: 6-16-26-36/37/39-43-45
Safety Statements: Keep under nitrogen. Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of fire, use dry powder. Never use water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT
Risk Statements: Reacts violently with water, liberating extremely flammable gases. Spontaneously flammable in air.
Harmful if swallowed. Causes burns.
Safety Statements: Keep under nitrogen. Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of fire, use dry powder. Never use water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No

CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: No
NDSL: No

Section 16 - Other Information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.