



LTS Research Laboratories, Inc.
Safety Data Sheet
Alane N,N-dimethylethylamine complex solution

1. Product and Company Identification

Trade Name: Alane N,N-dimethylethylamine complex solution
Chemical Formula: $C_2H_5N(CH_3)_2 \cdot AlH_3$, $C_4H_{14}AlN$
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 2001 Oaks Pkwy
City: Belmont
State: North Carolina
Zip Code: 28012
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word:

Danger



Hazard Statements:

H225: Highly flammable liquid and vapor.
H250: Catches fire spontaneously if exposed to air.
H261: In contact with water releases flammable gas.
H304: May be fatal if swallowed and enters airways.
H314: Causes severe skin burns and eye damage.
H336: May cause drowsiness or dizziness.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs (Central nervous system) through prolonged or repeated exposure.
H401: Toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects

Precautionary Statements:

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P222 Do not allow contact with air.
P223 Do not allow contact with water.
P231 + P232 Handle under inert gas. Protect from moisture.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302 + P334 IF ON SKIN: Immerse in cool water/ wrap in wet bandages.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all Contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P335 + P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.
 P363 Wash contaminated clothing before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-Resistant foam to extinguish.
 P402 + P404 Store in a dry place. Store in a closed container.
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P422 Store contents under inert gas.
 P501: Dispose of contents/container in accordance with local/regional/ national/international regulations

HMIS Health Ratings (0-4):

Health:
 Flammability:
 Physical:



N/A
 N/A
 N/A

3. Composition

Chemical Family:	N/A
Additional Names:	N/A
Alane N,N-dimethylethylamine complex solution (C ₂ H ₅ N(CH ₃) ₂ ·AlH ₃)	
Percentage:	100 wt%
CAS #:	124330-23-0
EC #:	203-625-9

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	N/A
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
Ingestion:	Rinse mouth with water. Do not induce vomiting. Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

5. Firefighting Measures

Flammability:	Highly Flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves Check gloves prior to each use
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	N/A
Form:	Liquid
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	-20 °C
Autoignition Temperature:	N/A
Density:	0.760 g/cm ³
Molecular weight:	103.14 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Water, Bases, Oxidizing agents, Strong oxidizing agents, Oxygen, Alcohols, Acids
Incompatible Conditions:	Heat, flames and sparks. Exposure to moisture.
Hazardous Decomposition Products:	N/A

11. Toxicological Information

Potential Health Effects:	
Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	May be fatal if swallowed
Inhalation:	May be fatal if enters airways
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	LD50 Oral- 5580 mg/kg for rat (male) by mouth
Carcinogen:	N/A

12. Ecological Information

Aquatic Toxicity:	Harmful to aquatic life with long lasting effects
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	Hazardous for transportation
	
Hazard Class:	4.2
Secondary Hazard Class:	4.3
Packing Group:	I
UN Number:	UN3394
Proper Shipping Name:	Organometallic substance, liquid, pyrophoric, water-reactive (Toluene, N,N-Dimethylethylamine alane) (Toluene, N,N-Dimethylethylamine alane)

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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