



Holland Company

Aluminum Ammonium Sulfate

Safety Data Sheet

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product/Chemical Name: Aluminum Ammonium Sulfate

Chemical Family: Inorganic aluminum salt

General use: Pharmaceutical, Research, Manufacturing applications

Company Information:

Holland Company, Inc.
153 Howland Avenue
Adams, MA 01220 U.S.A.
Phone: 413-743-1292 FAX: 413-743-1298

Emergency Phone:

1-800-424-9300 Chemtrac (USA)
1-613-996-6666 or Cell *666 CANTUTEC (Canada)

SECTION 2. HAZARDS IDENTIFICATION



WARNING – IRRITANT (Mild)
AVOID CONTACT

Hazard Statements

Harmful if ingested.
Irritating to eyes.
May be irritating to skin.
Dust may cause irritation to the respiratory system.

Precautionary Statements

Avoid direct contact.
Use protective equipment if direct contact is possible.
Wash hands thoroughly after contact.



SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance

Chemical name: Aluminum Ammonium Sulfate dodecahydrate

Name: Ammonium Alum

CAS#: 7784-26-1

EC number: 232-055-3

Impurities: NA. No impurities or additives which are themselves classified and which contribute to the classification of the substance.

SECTION 4. FIRST AID MEASURES

Eye contact:

Irritating sensation may occur.

Immediately rinse eyes with water for an extended period.

If irritation persists get medical care.

Skin contact:

Clean skin and rinse with water.

If irritation develops get medical attention.

If clothing has been contaminated clean and wash before reuse.

Inhalation of dust:

Move to fresh air.

If irritation develops get medical care.

Ingestion:

Oral irritation may occur.

Spontaneous vomiting may occur.

Do not actively induce vomiting.

Rinse mouth and drink water.

Get medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Flammability:

Product is not flammable and will not burn.

Controls:

If possible remove material from areas under fire threat.

Hazards:

In a fire dried product can decompose at > 280C (536F) and result in formation of sulfur oxides, and minimal ammonia. Exposure to products of decomposition during a fire may be hazardous to health.

Special equipment:

In case of possible exposure to products of decomposition use appropriate self-contained or other approved respiratory protection. Consult engineers if necessary.

Mechanical impact:

Not sensitive.

Static discharge:

Not sensitive.



SECTION 6. ACCIDENTIAL RELEASE MEASURES

General:

Avoid generating dust. Use protective equipment to avoid exposure to eyes, skin, and respiratory system. Consult engineers if necessary.

Personal protection:

If direct contact with spilled material is likely use appropriate protective equipment.

Releases:

Collect for reuse. Avoid creating dust during collection.
Dispose unused material in accordance with local, state, provincial and federal regulations.
Consult engineers if necessary.

SECTION 7. HANDLING AND STORAGE

Incompatible Chemicals:

Store separately from incompatible materials such as oxidizers. Consult engineers if necessary.

Containment:

Keep material in secure, closed containers.

General hygiene:

Do not eat, drink, take medication or smoke when direct contact is possible.
Always thoroughly wash hands after leaving a work area where contact is possible or has occurred.

Storage:

Keep in closed containers in dry, protected areas. Avoid extremes in temperatures.
Consult engineers if necessary.

Conditions for storage:

Exposure to excessive humidity or to water with result in product handling issues from product caking and hardening.

Ventilation:

No special requirements.

Personal protection:

If direct contact with material is likely use protective equipment.

SECTION 8. EXPOSURE CONTROL / PERSONNAL PROTECTION

Exposure Limits

No Information: Cross referenced for aluminum soluble salts

| | | |
|---|--|-----------------------------------|
| OSHA PEL TWA STEL 2mg/m ³ as Al none est. | ACGIH TLV TWA STEL 2mg/m ³ as Al none est. | NIOSH IDLH none est. |
|---|--|-----------------------------------|

Respiratory - Ventilation: Local passive ventilation is typically used. Under normal conditions respiratory protective equipment is not needed. If work requires direct exposure to product dust use appropriate, approved respiratory protection. Consult engineers if necessary.

Eye wash: Have an appropriate eye wash bottle, fountain, or safety shower available in the work area.

Eyes: Use protective eye glasses-goggles and face shield protection to prevent direct contact.

Skin: Use impervious gloves and foot covering. Wear long sleeve shirts and full length trousers.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, Clear to white crystals or powder.

Odor: Not significant.

Odor Threshold: NA

pH: 4.6 ± (0.05M solution).

Melting/Freeze point: 94.5C ±

Boiling point-range: NA

Flash point: NA

Evaporation rate: NA

Flammability: Not flammable.

Upper/lower flammability limits: NA

Vapor pressure/density: NA

Density: 1.645 ±

Water Solubility: approx. 15% @ 21C

Partial coefficient: n-octanol/water; NA, inorganic compound column 2 of REACH Annex VII.

Auto ignition: NA

Decomposition temperature: >280C (536F)

Viscosity: NA

SECTION 10. STABILITY AND REACTIVITY

Chemical stability:

Product is chemically stable under normal ambient temperature and conditions while stored or used.

Conditions to avoid: Do not exceed 280C (536F)

Materials to avoid: Strong bases, oxidizers. Consult engineers if necessary.

Decomposition products:

Thermal decomposition at temperatures encountered in fires can release irritating fumes.

SECTION 11. TOXICOLOGY INFORMATION

Toxicity:

Review suggests low order of potential toxicity

Oral (ingestion) estimate: Not available

Inhalation estimate: Not available

Dermal estimate: Not available

Effects of exposure:

Skin: Repeated contact may dry and irritate skin.

Eyes: May cause irritation.

Respiratory: Inhalation dust may cause bronchial irritation and coughing.

Ingestion: Can cause vomiting, irritation to mouth, throat, and stomach.

Mucous membranes: May cause irritation.

Sensitization: Not sensitizing

Carcinogenicity: NTP Not listed. IARC Not listed. OSHA Not listed.

Reproductive Toxicity, Mutagenic or teratogenic effects:

No known reproductive toxicity, mutagenic or teratogenic effects in animal experiments are known.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity: No data found.

Toxicity to other organisms: No data found.

Bioaccumulation potential: This product is not expected to bioaccumulate.

Octanol-water coefficient: NA, inorganic compound.

Biodegradability: Not applicable to inorganic substances.

Chemical degradability: In water at pH range of 5.5-8.8 precipitates of aluminum hydroxide are formed.

Mobility in Soil: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

RCRA Hazardous waste: Not listed.

Special precautions: None known

Container reuse: Dispose of Containers that cannot be thoroughly cleaned in accordance with local, state, provincial, and federal regulations. Consult engineers if necessary.

SECTION 14. TRANSPORTATION INFORMATION

Land (DOT), Sea (IMDG), Air (ICAO/IATA): Not regulated

UN number: Not regulated

Shipping name: Not regulated

Hazard class: Not regulated

Packing group: Not regulated

Environmental hazards: Not a marine pollutant

Special precautions: None

SECTION 15. REGULATORY INFORMATION

RCRA Hazardous waste: Not Listed. Consult engineers if necessary.

CERCLA Hazardous substance: Not listed CWA, Sec.311 (b) (4)

CERCLA Reportable Quantity (RQ): NA

SARA 311/312 Categories:

Acute (immediate) health effects: Yes (possible irritant)

Chronic (delayed) health effects: No

Sudden release of pressure hazard: No

Reactivity hazard: No

SARA 313 Toxic Chemical listing: Not listed

SARA Extremely hazardous substance (EHS): Not listed

OSHA Air (29CFR 1910.10000, table Z-1, Z-1A): Not listed

OSHA Special Regulated Substance (29CFR 1910): Not listed

ELINCS / REACH annex XIV: Not listed

REACH Pre-registered substances: Listed

United States TSCA Section Inventory Status: Product exempt or listed on the TSCA Inventory.

WHMIS: D2B (Possible eye irritant)

Canada CEPA / Canadian Domestic Substances List (DSL):

All components of this product are included on the DSL or not required to be listed.

State - Province regulations: State and Province specific regulations have not been determined by the Holland Company. Consult engineers if necessary.

Inventories: Chinese, Korean (ECL), Philippines (PICCS), Japanese (ENCS), European (EINECS), NZ.

SECTION 16. OTHER INFORMATION

Preparatory statement:

The information in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information we have available, and belief as of the publication date. The information is designed solely as guidance for handling, storage, transportation, release, and disposal and is not to be considered a warranty or quality specification.

Date Sources for the SDS:

Literature, databases, practice, publications, own tests, regulations

Revision:

May 2015 replaces all earlier

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