Material Safety Data Sheet

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product
Aluminum nitrate nonahydrate
Manufacturer/supplier identification
Company: Guangdong Guanghua Sci-Tech Co.,Ltd
Address: No.295 Daxue Road,Shantou
PostCode:515000
E-mail: export@jinhuada.com
Emergency telephone No.: +86-754-82515813.
Fax No.: +86-754-88221999

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Oxidizing solids (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2A)

Label elements
Pictogram



Signal word Warning

Hazard statement(s)
H272 May intensify fire; oxidizer.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.

Supplemental Hazard Statements
none

3. Composition/information on ingredients

Synonyms
Aluminum nitrate nonahydrate
CAS-No.: 7784-27-2
M: 375.13g/mol
Molecular formula: $Al(NO_3)_3 \cdot 9H_2O$

4. First aid measures

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire-fighting measures

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental release measures

Personal precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. Handling and storage

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Appropriate engineering controls
General industrial hygiene practice.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Do not let product enter drains.

9. Physical and chemical properties

Form: crystal

Colour: white and transparent

Odour: not available

pH value: 2.5 - 3.5 at 50 g/l at 25 ℃

Melting point: 73 ℃

Boiling point: not available

Ignition temperature: not available

Flash point: not available

Autoignition temperature: not available

Explosion limits

lower: not available

upper: not available

Density : not available

Bulk density: not available

Solubility in

water (20 ℃) : soluble in water

diluted acids (20 ℃) : not available

Thermal decomposition: not available

10. Stability and reactivity

Chemical stability
no data available

Conditions to avoid
Avoid moisture.

Materials to avoid
Strong reducing agents, Powdered metals, Strong acids

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx), Aluminum oxide, Borane/boron oxides, Iron oxides

11. Toxicological information

Acute toxicity
LD50 Oral - Rat - 3,671 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

12. Ecological information

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. Disposal considerations

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.

14. Transport information

ADR/RID
UN-Number: 1438 Class: 5.1 Packing group: III
Proper shipping name: ALUMINIUM NITRATE

IMDG
UN-Number: 1438 Class: 5.1 Packing group: III
Proper shipping name: ALUMINIUM NITRATE
Marine pollutant: no

IATA
UN-Number: 1438 Class: 5.1 Packing group: III
Proper shipping name: Aluminium nitrate

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. Other information

General update.
Regional representation:
This information is given on the authorised Safety Data Sheet for your country.