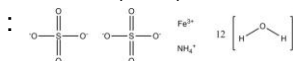


SECTION 1: Identification of the substance/preparation and of the company/undertaking

Identification of the Product

Product name : AMMONIUM FERRIC SULPHATE DODECAHYDRATE
 EC-No. : 233-382-4
 CAS-No. : 7783-83-7
 Formula : $\text{FeNH}_4(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$
 Chemical structure :



Alternate Name : Ammonium iron (III) sulphate Dodecahydrate, Ferric ammonium sulphate Dodecahydrate, Iron alum

Use of the Product/Preparation

Relevant identified uses

Use of the Product: Industrial raw material, Reagent for development and research

Details of the supplier of the safety data sheet

PHINE KEMIKALS INDIA

Plot No. 1/2/3/90/P3A, G.I.D.C. Industrial Estate, Godhra, Gujarat 389002

INDIA

T +919824063593

info@phinekem.in, www.phinekem.in

Emergency telephone number

Emergency number : + 919023930031 (24 hrs)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

SECTION 2: Hazards identification

Classification of the substance or mixture

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 2

H31

9 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation.

Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Single word (CLP): Warning (GHS07)

Hazard statements (CLP) : H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

Substances

Substance type : Mono-constituent
Name : AMMONIUM FERRIC SULPHATE DODECAHYDRATE
CAS-No : 7783-83-7
EC-No. : 233-382-4

Name	Product identifier	%
AMMONIUM FERRIC SULPHATE DODECAHYDRATE	CAS-No.: 7783-83-7 EC-No.: 233-382-4	100

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

General First Aid: If unwell, seek medical attention.

Inhalation: Move to fresh air and ensure comfortable breathing. If breathing is difficult, provide fresh air and rest.

Skin Contact: Wash with plenty of water. Wash contaminated clothing before reuse. Seek medical advice if irritation occurs.

Eye Contact: Rinse eyes carefully with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Ingestion: Rinse mouth. Do not induce vomiting. ¹ Contact a poison control center or doctor if unwell.

Most important symptoms and effects, both acute and delayed

Inhalation: Excessive dust inhalation may cause respiratory irritation. This material is considered a potential inhalation hazard.

Skin: Causes skin irritation.

Eyes: Causes serious eye irritation.

Ingestion: No known effects under normal conditions.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Appropriate Extinguishers: Use water spray, dry chemical, CO₂, or foam.

Inappropriate Extinguishers: Do not use a high-pressure water stream.

Special hazards arising from the substance or mixture

Fire: Not flammable.

Explosion: No explosion risk.

Fire Decomposition: Toxic fumes may be released in a fire.

Advice for firefighters

Firefighting:

Fight fire from a safe distance and protected location. Do not enter the fire area without full protective gear, including respiratory protection.

Firefighter Protection:

Do not enter the fire area without full protective gear, including respiratory protection. Use self-contained breathing apparatus and complete protective clothing.

SECTION 6: Accidental release measures

General Spill Measures:

- Notify authorities if the product enters sewers or waterways.

Contain spills to prevent material damage.

Personal precautions, protective equipment and emergency procedures

Non-Emergency Personnel:

- **Protection:** Wear recommended personal protective equipment.
- **Response:** Ventilate the spill area. Evacuate non-essential personnel. Avoid skin and eye contact.

Emergency Responders:

- **Protection:** Use appropriate personal protective equipment. Refer to Section 8 for detailed guidance.
- **Response:** Ventilate the area. Evacuate non-essential personnel.

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

Containment: Shovel the material into a dry container and cover it loosely. Avoid packing it down.

Cleanup: Collect the spilled material using equipment. Absorb any remaining liquid with clay or diatomaceous earth. Keep dust to a minimum.

Disposal: Take the waste to an approved disposal site.

SECTION 7: Handling and storage

Precautions for safe handling

Processing: Normal use poses no significant additional hazards.

Handling: Ensure ventilation. Avoid skin/eye contact and inhaling vapors. Use proper PPE.

Hygiene: Wash hands before breaks and after handling. Launder contaminated clothing. No eating/drinking/smoking during use.

Conditions for safe storage, including any incompatibilities

Storage: Store cool, ventilated, away from heat. Keep containers closed. Use original or same-material containers.

SECTION 8: Exposure controls/personal protection

Control parameters

National Occupational Exposure and Biological Limit Values: Not applicable.

Recommended Monitoring Procedures: Not applicable.

Air Contaminants Formed: Not applicable.

DNEL and PNEC: Not applicable.

Exposure controls

Control Banding: Not applicable.

Engineering Control Measures: Implement appropriate engineering controls, such as ensuring good ventilation of the work area.

Personal Protective Equipment (PPE): Wear the recommended personal protective equipment.



Personal protective equipment symbol(s):

Eye Protection: Use chemical goggles or safety glasses.

Skin Protection: Wear protective clothing.



MATERIAL SAFETY DATA SHEET
Product: Ammonium Ferric Sulfate 12-hydrate
Company: Phine Kemikals India

Hand Protection: Wear protective gloves.

Respiratory Protection: Wear an appropriate mask.

Thermal Hazards: No data available.

Environmental Controls: Prevent environmental release.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical Properties:

- **State:** Solid
- **Color:** Pale violet
- **Appearance:** Crystals
- **Odor:** Odorless
- **Odor Threshold:** Not available

Chemical Properties:

- **Molecular Weight:** 482.19 g/mol
- **Melting Point:** 39 – 41 °C
- **Boiling Point:** 230 °C
- **Flammability:** Non-flammable
- **pH:** 1.8 (10% solution)
- **Solubility (Water):** 1240 g/L at 25 °C (Soluble)
- **Density:** 1.71 g/cm³

Other Properties:

- **Freezing Point:** Not applicable
- **Explosive Limits (Lower/Upper):** Not applicable
- **Flash Point:** Not applicable
- **Auto-ignition Temperature:** Not applicable
- **Decomposition Temperature:** Not available
- **Viscosity (Kinematic):** Not applicable
- **Partition Coefficient (Log Kow):** Not available
- **Vapor Pressure:** Not available
- **Vapor Pressure (50 °C):** Not available
- **Relative Density:** Not available
- **Relative Vapor Density (20 °C):** Not applicable
- **Particle Size:** Not available

SECTION 10: Stability and reactivity

Reactivity

This product exhibits no reactivity under standard conditions of use, storage, and transportation.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

Conditions to avoid

Direct sunlight. Air contact. Moisture.

Incompatible materials

No additional information available

Hazardous decomposition products

This product does not decompose into hazardous substances during normal use.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

This substance is not classified for acute oral, dermal, or inhalation toxicity. It causes skin and serious eye irritation (pH 1.8). All other tested toxicity endpoints are not classified.

AMMONIUM FERRIC SULPHATE DODECAHYDRATE EXTRA PURE (7783-83-7)

Viscosity, kinematic	Not applicable
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Ecology - general : The product is not considered harmful to aquatic organisms nor to cause

SECTION 12: Ecological information

Toxicity

General Ecology: This product is not considered harmful to aquatic life or the environment in the long term.

Aquatic Toxicity: Not classified for acute or chronic aquatic hazards.

Persistence and degradability

AMMONIUM FERRIC SULPHATE DODECAHYDRATE EXTRA PURE (7783-83-7)

Persistence and degradability	Rapidly degradable
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Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Results of PBT and vPvB assessment

No additional information available

Endocrine disrupting properties

No additional information available

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Waste treatment methods

General Disposal: Dispose of waste according to all applicable local, regional, and national regulations.

Waste Treatment: Follow the sorting instructions provided by licensed waste collectors for disposal of contents and containers.

Sewage Disposal: Dispose of waste according to all applicable local, regional, and national regulations.

Product/Packaging Disposal: Comply with regulations for solid waste disposal. Dispose of waste according to all applicable local, regional, and national regulations.

Container Reuse: Do not reuse empty containers

SECTION 14: Transport information

Not subject to transport regulations (ADR/RID, ADN, IATA, IMDG)

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations:

- **REACH:**
 - Annex XVII (Restriction List): Not listed
 - Annex XIV (Authorization List): Not listed
 - Candidate List (SVHC): Not listed
- **Other EU Regulations:**
 - PIC Regulation (EU 649/2012): Not listed
 - POP Regulation (EU 2019/1021): Not listed
 - Ozone Regulation (EU 1005/2009): Not listed
 - Dual-Use Regulation (EC 428/2009): Contains no regulated substances
 - Explosives Precursors Regulation (EU 2019/1148): Contains no listed substances
 - Drug Precursors Regulation (EC 273/2004): Contains no listed substances

National Regulations:

- **Germany:**
 - Water Hazard Class (WGK): Not classified (AwSV)
 - Hazardous Incident Ordinance (12. BImSchV): Not subject to regulation
- **Netherlands:**
 - Carcinogenic Substances (SZW): Not listed
 - Mutagenic Substances (SZW): Not listed
 - Reprotoxic Substances (Breastfeeding) (SZW): Not listed
 - Reprotoxic Substances (Fertility) (SZW): Not listed
 - Reprotoxic Substances (Development) (SZW): Not listed

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and Acronyms:

- **Transport Regulations:**
 - ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 - ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 - IATA: International Air Transport Association
 - IMDG: International Maritime Dangerous Goods
 - RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
- **Toxicity and Health:**
 - ATE: Acute Toxicity Estimate
 - BLV: Biological Limit Value
 - DMEL: Derived Minimal Effect Level
 - DNEL: Derived-No Effect Level
 - EC50: Median effective concentration
 - IARC: International Agency for Research on Cancer
 - LC50: Median lethal concentration
 - LD50: Median lethal dose
 - LOAEL: Lowest Observed Adverse Effect Level
 - NOAEC: No-Observed Adverse Effect Concentration
 - NOAEL: No-Observed Adverse Effect Level
 - NOEC: No-Observed Effect Concentration
 - OEL: Occupational Exposure Limit
 - TLM: Median Tolerance Limit
 - ED: Endocrine disrupting properties
- **Environmental:**

- BCF: Bioconcentration factor
 - BOD: Biochemical oxygen demand
 - COD: Chemical oxygen demand
 - OECD: Organisation for Economic Co-operation and Development
 - PBT: Persistent Bioaccumulative Toxic
 - PNEC: Predicted No-Effect Concentration
 - STP: Sewage treatment plant
 - ThOD: Theoretical oxygen demand
 - vPvB: Very Persistent and Very Bioaccumulative
 - VOC: Volatile Organic Compounds
- **Other:**
 - CAS-No.: Chemical Abstract Service number
 - EC-No.: European Community number
 - EN: European Standard
 - N.O.S.: Not Otherwise Specified
 - SDS: Safety Data Sheet
 - **Hazard Statements:**
 - Eye Irrit. 2: Serious eye damage/eye irritation, Category 2
 - H315: Causes skin irritation.
 - H319: Causes serious eye irritation.
 - Skin Irrit. 2: Skin corrosion/irritation, Category 2

Disclaimer:

This Safety Data Sheet (SDS) information is based on our current knowledge and is intended to describe the product for health, safety, and environmental purposes only. It should not be interpreted as a guarantee of any specific product property.