Ministry of Employment and Labor	Material Safety Data Sheet	Industrial Accident Prevention Korea Occupational Safety and Health Agency (KOSHA)

AA00569-0000000008

1. PRODUCT AND COMPANY IDENTIFICATION

A. Product Name	Ferrous Ammonium Sulfate Hexahydrate
B. Recommended Use and Restrictions on Use	
Recommended Use	Not available
Restrictions on Use	Not available
C. Supplier Information (For imports, provide local supplier information for emergency contact)	
Company Name	GloryGlobal Co., Ltd.
Address	Room 1004, Seoul-Technopark, inside Seoul Tech, 232, Gongneung-ro, Nowon-gu, Seoul, Korea 01811
Emergency Contact Number	02-6223-0862
D. Additional Manufacturer/Supplier Information	

2. Hazards identification

A. Hazard/Risk Classification	Not classified as a hazardous substance or mixture according to GHS.
B. GHS Label Elements	
Signal Word	Not applicable
Hazard Statements	Not applicable
Precautionary Statements	
Prevention	Not available
Response	Not available
Storage	Not available
Disposal	Not available
C. Other Hazards Not Included in Classification Criteria (e.g., dust explosion hazard)	

3. Composition/Information on Ingredients

Substance Name	Ammonium iron(II) sulfate-6-hydrate, extra pure
Synonyms	Ammonium ferrous sulfate hexahydrate
CAS No.	7783-85-9
Content (%)	100%

4. First-Aid Measures

A. Eye Contact	In case of eye contact, rinse immediately with plenty of water and seek medical advice.
B. Skin Contact	If skin contact occurs, wash off immediately with plenty of water.
C. Inhalation	Move the person to fresh air.
	If not breathing, perform artificial respiration.
	If experiencing difficulty in breathing, administer oxygen.
	If a trained person is available, oxygen may be administered as needed.
	Seek medical attention.
D. Ingestion	Immediately give plenty of water to drink.
	If accidentally swallowed, seek medical advice immediately.
E. Notes for Physician	The first-aid responder must ensure their own protection.
	Evacuate from the hazardous area.
	Immediately remove all contaminated clothing.
	Show this Safety Data Sheet to the attending physician.

5. Fire-Fighting Measures

A. Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media	Water spray, foam, carbon dioxide (CO_2), dry powder
Unsuitable Extinguishing Media	Not available

B. Specific Hazards Arising from the Chemical

During fire, the following hazardous decomposition products may be produced:

Sulfur oxides

Nitrogen oxides (NOx)

Ammonia

Toxic metal oxide gases

C. Special Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and protective clothing.

Ensure complete coverage to prevent skin exposure.

Use fire extinguishing methods appropriate to local conditions and surrounding environment.

6. Accidental Release Measures

A. Personal Precautions and Protective Equipment

Evacuate people to a safe area.

Wear personal protective equipment. Do not allow access without appropriate protective gear.

Ensure adequate ventilation.

Avoid creating or inhaling dust.

Avoid contact with skin, eyes, and clothing.

B. Environmental Precautions

Prevent further leakage or spillage if it can be done safely.

Do not allow the product to enter drains or waterways.

Methods and Materials for Containment and Cleaning Up

Use mechanical handling equipment.

Sweep up or vacuum spilled material and place it in a suitable container for disposal.

Dispose of in accordance with national regulations.

7. Handling and Storage

A. Precautions for Safe Handling

Use mechanical handling equipment.

Use only in well-ventilated areas.

B. Conditions for Safe Storage

Prevent the ingress of air/oxygen.

Protect from light.

Storage period: <12 months.

8. Exposure Controls and Personal Protection

A. Exposure Limits, Biological Exposure Limits, etc.

Composition Component	CAS Number	Exposure Limit	Control Factor	Revision Date	Legal Basis
Ammonium iron(II) sulfate-6 hydrate	7783-85-9	TWA (Time Weighted Average): 1 mg/m³	1 mg/m3	08 2016	KR OEL: Occupational Exposure Limit designated hazardous agent
Additional Notes	Indicated as containing iron				

B. Appropriate Engineering Controls

Not available

C. Personal Protective Equipment

Respiratory Protection	Wear appropriate respiratory protection if ventilation is inadequate.
Eye Protection	Safety goggles with side shields.
Hand Protection	Latex gloves.
	Inspect gloves before use.
	Replace if worn or damaged.
Body Protection	Protective clothing.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Precautionary Measures	Provide eye wash and safety shower facilities near the work area.
	Comply with legal requirements when selecting, using, and maintaining personal protective equipment.
	Avoid inhalation of dust.

9. Physical and Chemical Properties

A. Appearance

Physical state	Crystalline solid
Color	Blue-green
B. Odor	Odorless
C. Odor Threshold	Not available
D. pH	Not available
E. Melting/Freezing Point (°C)	Not available
F. Initial Boiling Point and Boiling Range	Not available
G. Flash Point	Not applicable
H. Evaporation Rate	Not available
I. Flammability (solid, gas)	Non-flammable
J. Upper/Lower Flammability or Explosive Limits	Not applicable
K. Vapor Pressure	Not available
L. Solubility	269.0 g/l at 20 °C
M. Density	Approx. 1.860 g/cm³ at 20 °C
	Bulk density: Approx. 840 kg/m³
N. Relative Density	Not available
O. Partition Coefficient (n-octanol/water)	Not available

P. Auto-ignition Temperature	Not available
Q. Decomposition Temperature (°C)	Note: Loss of crystal water upon heating. No thermal decomposition when used as directed.
R. Viscosity	Not available
S. Molecular Weight	Not available

10. Stability and Reactivity

A. Chemical Stability and Possibility of Hazardous Reactions

Stable under recommended storage conditions.

No hazardous polymerization occurs.

B. Conditions to Avoid (e.g., Static Discharge, Shock, Vibration)

Protect from exposure to air or oxygen.

C. Incompatible Materials

Contact with strong bases releases ammonia.

D. Hazardous Decomposition Products

In case of fire, the following hazardous decomposition products may be generated:

Sulfur oxides

Nitrogen oxides (Nox)

Ammonia

Toxic metal oxide gases

11. Toxicological Information

A. Likely Routes of Exposure

B. Health Hazards

Acute Toxicity

Oral	LD50: 3,250 mg/kg, rat
Dermal	Not available
Inhalation	Not available
Skin Corrosion/Irritation	Not available
Serious Eye Damage/Irritation	Not available
Respiratory Sensitization	Not available
Skin Sensitization	Not available
Carcinogenicity	Not available
Industrial Safety and Health Act (Korea)	Not available
Ministry of Employment and Labor Notice (Korea)	Not available

Germ Cell Mutagenicity	Not available
Reproductive Toxicity	Not available
Specific Target Organ Toxicity (Single Exposure)	Not available
Specific Target Organ Toxicity (Repeated Exposure)	Not available
Aspiration Hazard	Not available
Other Adverse Effects	Not available

12. Ecological Information

A. Ecotoxicity

Fish	Not available
Crustacea	Not available
Algae	Not available
Bacteria	

B. Persistence and Degradability

Persistence	Not available
Degradability	Not available

C. Bioaccumulative Potential

Bioaccumulation	Not available
Biodegradability	Not available
D. Mobility in Soil	Not available
E. Other Adverse Effects	Not available

13. Disposal Considerations

A. Disposal Methods	Dispose of in accordance with national and local government regulations.

14. Transport Information

A. ADR	Not classified as hazardous material.
B. Hazard Classification for Transport	
IMDG	Not classified as hazardous material.
IATA	Not classified as hazardous material.
C. RID	Not classified as hazardous material.

15. Regulatory Information

A. Regulation under Hazardous Materials Safety Control Act

Not applicable

KO_TOX: Korea. Toxic substances designated under the Chemical Substances Control Act (K-REACH) Article 20; Annex 1 for toxic, restricted, or prohibited substances.

B. TRI (KO): Korea. Toxic Release Inventory

Not applicable

KO HAR SUB: Korea. Hazardous substances requiring permission for manufacture or use under the Occupational Safety and Health Act Presidential Decree (No. 13053), Article 30.

C. KR HRM PRO: Korea. Prohibited hazardous substances for manufacture, etc.

Not applicable

D. KR ARP: Korea. Accident Preparedness Substances

Not applicable

E. KR CHS: Korea. Controlled hazardous substances

Ammonium iron(II) sulfate-6-hydrate (CAS No. 7783-85-9)

F. KR WEM: Korea. Hazardous agents subject to workplace environment measurement

Not applicable

G. KR SME: Korea. Hazardous agents subject to special health examinations

Not applicable

KO BAN: Korea. Prohibited substances under the Chemical Substances Control Act (K-REACH) Article 27; Annexes 4 and 5 for toxic, restricted, or prohibited substances.

H. KO RES: Korea. Restricted substances under the Chemical Substances Control Act (K-REACH)

Not applicable

I. Regulation under Waste Management Act

Applies to industrial waste at workplaces.

J. Regulation under foreign laws

USA TSCA Inventory	Listed
Australia Industrial Chemicals (Notification and Assessment) Act	Compliant
Canada Environmental Protection Act (CEPA)	All components listed in Canadian DSL
Canada Domestic Substances List (DSL)	All components listed
Japan Kashinhou Law Inventory	Compliant
Korea KECI (Hazardous Chemicals Inventory)	Not compliant
Philippines Toxic, Hazardous, and Nuclear Waste Control Act	Compliant

China Inventory of Existing Chemical Substances	Compliant
New Zealand Chemical Inventory	Compliant

16. Other Information

A. Source of Information

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group

B. Date of First Issue 2021-01-27

C. Number of Revisions and Date of Last Revision

Number of revisions

Date of last revision 2025-03-20

D. Others

	HMIS III	NFPA
Health Hazard:	1*	1
Flammability:	0	0
Physical Hazard:	0	
Instability/Reactivity:		0

*Chronic Health Hazards

-Hazardous substance rating and classification systems (e.g., HMIS® III, NFPA): This information is intended only for individuals trained in the use of these systems.

This information is believed to be reliable but is provided without warranty regarding its accuracy or suitability.