



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Iron (II) Ammonium Sulfate Hexahydrate**  
PRODUCT NUMBER: 2044  
CAS NUMBER: 7783-85-9  
SYNONYMS: Ammonium ferrous sulfate, hexahydrate; Iron ammonium sulfate hydrate; Sulfuric acid, ammonium iron (2+) salt, hexahydrate; Ammonium iron(II) sulfate; Mohr's salt

### MANUFACTURER:

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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Warning**

### Hazard Statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

### Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

### HMIS CLASSIFICATION:

Health: 1      Fire: 0      Reactivity Hazard: 1

### NFPA RATING:

Health: 1      Flammability: 0      Reactivity Hazard: 1

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

**EYE CONTACT:** Causes skin irritation.

**SKIN CONTACT:** Causes serious eye irritation.

**INHALATION:** May cause respiratory irritation.

**INGESTION:** May be harmful if swallowed.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $\text{FeSO}_4(\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$

Molecular Weight: 392.14

CHEMICAL NAME	CAS#	%
Iron (II) ammonium sulfate hexahydrate	7783-85-9	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with plenty of water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Ammonia, nitrogen oxides, iron oxides, and sulfur oxides.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Neutralize spill. Sweep up and place in suitable container for proper disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols. Handle under dry protective gas.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Store under dry inert gas. Protect from exposure to light. This product is air sensitive

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity
Iron Ammonium sulfate hexahydrate	1 mg/m <sup>3</sup>	TLV	ACGIH
	1 mg/m <sup>3</sup>	PEL	OSHA
	1 mg/m <sup>3</sup>	REL	NIOSH

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Green to blue green solid

**ODOR:** None

**MOLECULAR WEIGHT:** 392.14

**BOILING POINT:** No data available

**MELTING POINT:** 100°C (dec.)

**SPECIFIC GRAVITY:** 1.864

**VAPOR DENSITY:** No data available

**SOLUBILITY IN WATER:** Soluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Light and air

**INCOMPATIBILITY:** Oxidizing agents, air, light, and strong acids

**DECOMPOSITION PRODUCTS:** Ammonia, nitrogen oxides, iron oxides, and sulfur oxides.

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – 3250mg/kg

**CARCINOGENIC EFFECTS:** No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

**MUTAGENIC EFFECTS:** Not available

**TETRAOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** Not available

**RTECS:** BR6500000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## **SECTION 14 TRANSPORTATION DATA**

Not a dangerous good.

## **SECTION 15 REGULATORY INFORMATION**

**TSCA:** Listed in the TSCA inventory

**SARA 302/304:** Not Listed

**SARA 311/312:** Acute Health Hazard

**SARA (TITLE 313):** Iron ammonium sulfate hexahydrate

**CALIFORNIA PROP. 65:** Not Listed

**WHMIS CANADA:** Not Listed

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** Iron ammonium sulfate hexahydrate

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Iron ammonium sulfate hexahydrate

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Iron ammonium sulfate hexahydrate

## **SECTION 16 OTHER INFORMATION**

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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**SDS DEPT.**