

MATERIAL SAFETY DATA SHEET
Iron(II) sulfate heptahydrate

Section 1 - Chemical Product and Company Identification

MSDS Name:	Iron(II) sulfate heptahydrate
Catalog Numbers:	20139-0000, 20139-0010, 20139-0050, 20139-2500, 42373-0000, 42373-0030, 42373-0050, 42373-5000
Synonyms:	Ferrous sulfate heptahydrate
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
7782-63-0	Ferrous sulfate heptahydrate	99+%	unlisted		

Text for R-phrases: see Section 16

Hazard Symbols: XN



Risk Phrases: 22 36/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. Irritating to eyes and skin.

Potential Health Effects

Eye:	Causes eye irritation.
Skin:	Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion:	Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation:	May cause respiratory tract irritation. May be harmful if inhaled.
Chronic:	

Section 4 - First Aid Measures

Eyes:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Get medical aid. Wash mouth out with water.
Inhalation:	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician:	Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling:	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Storage:	Store in a cool, dry place. Store in a tightly closed container. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

CAS# 7720-78-7:

Belgium - TWA: (iron salts (soluble)): 1 mg/m³ VLE (as Fe)

Malaysia: (iron salts (soluble)): 1 mg/m³ TWA (as Fe)

Netherlands: (iron salts (soluble)): 1 mg/m³ MAC (as Fe)

Spain: (iron salts (soluble)): 1 mg/m³ VLA-ED (as Fe)

CAS# 7782-63-0:

Belgium - TWA: (iron salts (soluble)): 1 mg/m³ VLE (as Fe)

Malaysia: (iron salts (soluble)): 1 mg/m³ TWA (as Fe)

Netherlands: (iron salts (soluble)): 1 mg/m³ MAC (as Fe)

Spain: (iron salts (soluble)): 1 mg/m³ VLA-ED (as Fe)

Personal Protective Equipment

Eyes:	Wear chemical splash goggles.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystals
Color: light green - blue
Odor: odorless
pH: 3-4 (50 g/l aq.sol (20°C))
Vapor Pressure: 14.6mmHg @25 deg C
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 64 deg C (147.20°F)
Autoignition Temperature: Not available
Flash Point: Not available
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature:
Solubility in water: 25.6 g/100ml (20°C)
Specific Gravity/Density:
Molecular Formula: FeO4S.7H2O
Molecular Weight: 278.01

Section 10 - Stability and Reactivity

Chemical Stability: Air sensitive. Moisture sensitive.
Conditions to Avoid: Incompatible materials, exposure to air, exposure to moist air or water.
Incompatibilities with Other Materials Strong oxidizing agents, strong bases.
Hazardous Decomposition Products Oxides of sulfur, oxides of iron.
Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7720-78-7: NO8500000
CAS# 7782-63-0: NO8510000
LD50/LC50: RTECS:
CAS# 7720-78-7: Oral, mouse: LD50 = 680 mg/kg;
Oral, rat: LD50 = 319 mg/kg;
Oral, rat: LD50 = 533 mg/kg;
. RTECS:
CAS# 7782-63-0: Oral, mouse: LD50 = 1520 mg/kg;
. **Carcinogenicity:** Ferrous sulfate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Ferrous sulfate heptahydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not regulated.	Not regulated.	Not regulated.
Hazard Class:			
UN Number:			
Packing Group:			

USA RQ: CAS# 7720-78-7: 1000 lb final RQ; 454 kg final RQ

USA RQ: CAS# 7782-63-0: 1000 lb final RQ (listed under Ferrous sulfate); 454 kg final RQ (I

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 46 If swallowed, seek medical advice immediately and show this container or label.

WGK (Water Danger/Protection)

CAS# 7720-78-7: 1

CAS# 7782-63-0: Not available

Canada

CAS# 7720-78-7 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7720-78-7 is listed on the TSCA Inventory.

CAS# 7782-63-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR720.3(u)(2)).

Section 16 - Other Information

Text for R-phrases from Section 2

MSDS Creation Date: 7/16/1996

Revision #1 Date 2/27/2008

Revisions were made in Sections: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

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