

Material Safety Data Sheet

Creation Date 24-Dec-2009

Revision Date 24-Dec-2009

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Iron(III) nitrate nonahydrate

Cat No. AC202490000; AC202490010; AC202492500

Synonyms Ferric nitrate

Recommended Use Laboratory chemicals

CompanyEntity / Business NameFisher ScientificAcros Organics

One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Emergency Telephone Number

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

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Oxidizer: Contact with combustible/organic material may cause fire. Irritating to eyes, respiratory system and skin. Hygroscopic.

Appearance Purple Physical State Solid odor odorless

Target Organs Skin, Respiratory system, Eyes

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes Irritating to eyes.

Skin Irritating to skin. May be harmful in contact with skin. **Inhalation** Irritating to respiratory system. May be harmful if inhaled.

Ingestion May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting

and diarrhea.

Chronic Effects None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Iron(III) nitrate nonahydrate	7782-61-8	>95
Ferric nitrate	10421-48-4	-

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion Do not induce vomiting. Obtain medical attention.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point No information available.

Method No information available.

Autoignition Temperature No information available.

Explosion Limits

UpperNo data availableLowerNo data available

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable Extinguishing Media No information available.

Hazardous Combustion Products No information available.

Sensitivity to mechanical impactNo information available.Sensitivity to static dischargeNo information available.

Specific Hazards Arising from the Chemical

May ignite combustibles (wood paper, oil, clothing, etc.).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA Health 2 Flammability 1 Instability 2 Physical hazards OX

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions Should not be released into the environment.

Uρ

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep away from clothing and other combustible materials. Avoid dust formation.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin,

or on clothing. Avoid ingestion and inhalation. Keep away from clothing and other combustible

materials. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near Storage

combustible materials. Store under an inert atmosphere.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ensure that evewash stations and safety showers are close to the workstation location. Ensure **Engineering Measures**

adequate ventilation, especially in confined areas.

This product does not contain any hazardous materials with occupational exposure limits **Exposure Guidelines**

established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Skin and body protection **Respiratory Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves and clothing to prevent skin exposure.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid **Appearance** Purple odorless odor

Odor Threshold No information available. pН No information available.

Vapor Pressure negligible

No information available. **Vapor Density Viscosity** No information available. **Boiling Point/Range** No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point/Range 47°C / 116.6°F

Decomposition temperature °CNo information available.

No information available.

Evaporation RatenegligibleSpecific Gravity1.680

SolubilitySoluble in waterlog PowNo data available

Molecular Weight 404

Molecular Formula Fe N3 O9 . 9 H2 O

10. STABILITY AND REACTIVITY

Stability Oxidizer: Contact with combustible/organic material may cause fire.

Hygroscopic.

Conditions to Avoid Incompatible products. Excess heat. Combustible material. Avoid

dust formation. Exposure to moist air or water. Temperatures above

°C.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Nitrogen oxides (NOx)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions . None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component LD50 Oral		LD50 Dermal	LC50 Inhalation
Iron(III) nitrate nonahydrate	3250 mg/kg (Rat)	Not listed	Not listed

Irritation Irritating to eyes, respiratory system and skin

Toxicologically Synergistic

Products

No information available.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.

Mutagenic Effects No information available.

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity No information available.

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological properties have not

been fully investigated...

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available..

Persistence and Degradability

Bioaccumulation/ Accumulation

No information available

Mobility

No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national

hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT

UN-No UN1466

Proper Shipping Name FERRIC NITRATE

Hazard Class 5.1 Packing Group III

TDG

UN-No UN1466

Proper Shipping Name FERRIC NITRATE

Hazard Class 5.1 Packing Group

IATA

UN-No UN1466
Proper Shipping Name Ferric nitrate

Hazard Class 5.1 Packing Group III

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No UN1466
Proper Shipping Name Ferric nitrate

Hazard Class 5.1 Packing Group

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Iron(III) nitrate nonahydrate	-	-	-	-	-		Х	Χ	Χ	Х	-
Ferric nitrate	Х	Χ	-	233-899-	-		Х	Χ	Χ	Χ	KE-
				5							21136
											Χ

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard
Chronic Health Hazard
No
Fire Hazard
No
Sudden Release of Pressure Hazard
No
Reactive Hazard
Yes
No
Yes

Clean Water Act

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Ferric nitrate	X	1000 lb	-	-

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs	
Ferric nitrate	1000 lb	-	

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Iron(III) nitrate nonahydrate	-	X	X	-	-
Ferric nitrate	X	X	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

C Oxidizing materials D2B Toxic materials



16. OTHER INFORMATION

Prepared By Regulatory Affairs

Thermo Fisher Scientific Tel: (412) 490-8929

Creation Date 24-Dec-2009

Print Date 24-Dec-2009

Revision Summary "***", and red text indicates revision

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS