

# **SAFETY DATA SHEET**

Issuing Date 02-Apr-2010 Revision Date 08-Jan-2016 Revision Number 2

# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

Product Name Ferric Sulfate, Hydrate

Other means of identification

Product Code(s) 0629

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use For Further Manufacturing Use Only.
Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company AddressManufacturer AddressVWR International, LLCVWR International, LLCRadnor Corporate Center28600 Fountain Parkway100 Matsonford RoadSolon, Ohio 44139

Radnor, PA 19087-8660

Company Phone Number 1-800-448-4442 E-mail Address info@amresco-inc.com

**Emergency Telephone Number** 

Emergency Telephone Number Chemtrec 1-800-424-9300

# 2. HAZARDS IDENTIFICATION

# Classification

### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Corrosive to metals	Category 1

### Label elements

# **Emergency Overview**

#### Danger

#### Hazard statements

H302 - Harmful if swallowed H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H290 - May be corrosive to metals



Appearance Yellow

Physical State Fine Crystalline Powder

Odor No information available

# **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Keep only in original container

# **Precautionary Statements - Response**

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Absorb spillage to prevent material damage

### **Precautionary Statements - Storage**

Store in corrosive resistant/ .? container with a resistant inner liner

# **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not regulated

# Other Information

• Harmful to aquatic life with long lasting effects

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Ferric sulfate	10028-22-5	233-072-9	95-100	Not applicable

# 4. FIRST AID MEASURES

### **First Aid Measures**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes.

**Inhalation** Move to fresh air. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water and afterwards drink plenty of water. Consult a physician.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

# **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

# **Specific Hazards Arising from the Chemical**

No information available.

**Hazardous Combustion** 

Sulfur oxides.

**Explosion Data** 

**Products** 

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

### **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.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

**Personal protection** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions** 

**Environmental Precautions** See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area

and wash spill site after material pickup is complete.

# 7. HANDLING AND STORAGE

**Precautions for Safe Handling** 

Handling Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

Protect from light and moisture.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic. Protect

from light.

Incompatible Products Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

No information available

#### Control parameters

Exposure Guidelines This product does not contain

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

established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ferric sulfate	=	=	-
10028-22-5			

### Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

Odor

Remarks • Method

provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Physical State Fine Crystalline Powder

Appearance Yellow

Color No information available Odor Threshold No information available

<u>Property</u> <u>Values</u>

**pH** No information available

Melting point/freezing point 480 °C

Boiling Point/Range No information available
Flash Point (High in °C) No information available
Evaporation Rate No information available
Flammability (solid, gas) No information available

Flammability Limit in Air Upper flammability limit:

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor Density
Specific Gravity
Water Solubility in other solvents

No information available
No information available
No information available
Very soluble in water
No information available

Partition coefficient
Autoignition Temperature
Decomposition Temperature
Kinematic viscosity
Dynamic viscosity
No information available

**Other Information** 

**Oxidizing Properties** 

Softening PointNo information availableMolecular WeightNo information availableVOC ContentNo information available

No information available

Density 3.097 (anhydrous)

Bulk Density No information available

# 10. STABILITY AND REACTIVITY

# Reactivity

No data available

# **Chemical Stability**

Stable under recommended storage conditions.

# **Possibility of Hazardous Reactions**

None under normal processing.

# **Conditions to Avoid**

Protect from light and moisture.

#### **Incompatible Materials**

Strong oxidizing agents.

# **Hazardous Decomposition Products**

Sulfur oxides.

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

# **Product Information**

**Inhalation** There is no data available for this product.

**Eye Contact** May cause irreversible damage to eyes.

**Skin Contact** Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Irritating to skin.

**Ingestion** Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ferric sulfate	= 500 mg/kg (Rat)	-	-
10028-22-5			

# Information on toxicological effects

**Symptoms** No information available.

# Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Mutagenic EffectsNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ferric sulfate	-	-	-	-
10028-22-5				

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
Target Organ Effects
Aspiration hazard
No information available.
No information available.
Liver, Gastrointestinal tract (GI).
No information available.

# Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Ferric sulfate	-	37.2: 96 h Gambusia affinis mg/L	-
10028-22-5		LC50 static	

# Persistence and Degradability

No information available.

# **Bioaccumulation/Accumulation**

No information available.

Chemical Name	Partition coefficient
Ferric sulfate	-
10028-22-5	

Other Adverse Effects No information available

# 13. DISPOSAL CONSIDERATIONS

# Waste treatment methods

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ferric sulfate	-	-	-	-
10028-22-5				

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ferric sulfate	-	-	-	-
10028-22-5				

Chemical Name	California Hazardous Waste Status
Ferric sulfate	-
10028-22-5	

# 14. TRANSPORT INFORMATION

**DOT** Not regulated

IATA Not regulated

# 15. REGULATORY INFORMATION

International Inventories

**TSCA** Complies Complies **DSL/NDSL EINECS/ELINCS** Complies Complies **ENCS** Complies **IECSC** Complies **KECL PICCS** Complies Complies **AICS** 

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

# **U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Ferric sulfate	-
10028-22-5 ( 95-100 )	

### SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardNoFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

# **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ferric sulfate	1000 lb	-	-	Χ
10028-22-5				

# **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)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Ferric sulfate 10028-22-5	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

# **U.S. State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65	
Ferric sulfate - 10028-22-5	ē	

# U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ferric sulfate	X	X	X
10028-22-5			

# **U.S. EPA Label Information**

EPA Pesticide Registration Number Not regulated

# **16. OTHER INFORMATION**

Issuing Date 02-Apr-2010
Revision Date 08-Jan-2016
Revision Note

No information available

# **Disclaimer**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

**End of Safety Data Sheet** 

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