OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599
Email : info@ottokemi.com, Web : www.ottokemi.com

----------ISO 9001: 2015----------

MATERIAL SAFETY DATA SHEET

SECTION 1 Product identifiers
Product name : Ferric sulphate, pentahydrate, 97%
Product Code: F 1358
CAS-No. : 142906-29-4

2. Hazard(s) identification
Classification This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard
Label Elements
Signal Word
Danger
Hazard Statements
May be corrosive to metals
Harmful if swallowed
Iron(III)sulfate pentahydrate Revision Date25-Dec-2021Causes skin irritation
Causes serious eye damage
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
Keep only in original container
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
ContinuerinsingImmediately call a POISON CENTER or doctor/physician
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Spills
Absorb spillage to prevent material damage
Storage
Store in corrosive resistant polypropylene container with a resistant inliner
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Sulfuric acid, iron (3+) salt (3:2), pentahydrate	142906-29-4	>95
Ferric sulfate	10028-22-5	-

4. First-aid measures
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical attention is required. Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.
Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. If breathingisdifficult, give oxygen.
Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Most important symptoms and effects
None reasonably foreseeable. Causes eye burns. Notes to Physician Treat symptomatically

5. Fire-fighting measures
Unsuitable Extinguishing Media No information available
Flash Point No information available
Method - No information available
Autoignition Temperature No information available
Explosion Limits

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available
Specific Hazards Arising from the Chemical
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away fromheat andsources of ignition. Hazardous Combustion Products
Sulfur oxides. Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) andfull protective gear.

6. Accidental release measures
Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoiddust formation.
Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological Information.
Methods for Containment and Clean Up
Sweep up and shovel into suitable containers for disposal. Avoid dust formation

7. Handling and storage
Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoidcontact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. IncompatibleMaterials. Strong oxidizing agents.

8. Exposure controls / personal protection
Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Ferric sulfate	TWA: 1 mg/m3	(Vacated) TWA: 1 mg/m3	TWA: 1 mg/m3	TWA: 1 mg/m3

Engineering Measures None under normal use conditions. Ensure that eyewash stations and safety showersareclose to the workstation location.
Personal Protective Equipment
Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as describedbyOSHA's eye and face protection regulations in 29 CFR 1910.133 or EuropeanStandardEN166.
Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection No protective equipment is needed under normal use conditions.
Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. Physical and chemical properties

Physical State	Solid
Appearance	Yellow
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	Fe2 O12 S3 . 5 H2 O
Molecular Weight	489.96

10. Stability and reactivity
Reactive Hazard None known, based on information available
Stability Stable under normal conditions. Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.Incompatible Materials Strong oxidizing agents
Hazardous Decomposition Products Sulfur oxides
Hazardous Polymerization Hazardous polymerization does not occur. Hazardous Reactions None under normal processing.

11. Toxicological information

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ferric sulfate	500-2000 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products

No information available

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

Irritation Causes eye burns Irritating to skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as acarcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sulfuric acid, iron (3+) salt (3:2), pentahydrate	142906-29-4	Not listed	Not listed	Not listed	Not listed	Not listed
Ferric sulfate	10028-22-5	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available. Developmental Effects No information available. Teratogenicity No information available. STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed

No information available

Endocrine Disruptor Information No information available

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological propertieshavenotbeen fully investigated

12. Ecological information

Ecotoxicity

Do not empty into drains. Persistence and Degradability Soluble in water Persistence is unlikely based on information available. Bioaccumulation/ Accumulation No information available. Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classifiedasahazardous waste. Chemical waste generators must also consult local, regional, andnational hazardous waste regulations to ensure complete and accurate classification

14. Transport information

DOT

UN-No UN3260

Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s. Technical Name Sulfuric acid, iron (3+) salt (3:2), pentahydrate

Hazard Class 8

Packing Group III

TDG

UN-No UN3260

Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s. Hazard Class 8

Packing Group III

IATA

UN-No UN3260

Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s. Hazard Class 8

Packing Group III

IMDG/IMO

UN-No UN3260

Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s. Hazard Class 8

Packing Group III

15. Regulatory information

Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

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

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

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

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the HazardousProducts Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Section 16: Other Information
This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.