OTTO CHEMIE PVT LTD

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

MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Ferrous oxalate Code F 1381						
2.Hazard identification 2.1Classification of the substance or Acute toxicity - Oral, Category 4 Acute toxicity - Dermal, Category 4 2.2GHS label elements, including pr Pictogram(s)						
Signal word Hazard statement(s)	Warning H302 Harmful if swallowed H312 Harmful in contact with skir					
Precautionary statement(s) Prevention	P264 Wash thoroughly after ha P270 Do not eat, drink or smoke P280 Wear protective gloves/prof	andling. when using this product.	/face protection.			
Response	P301+P312 IF SWALLOWED: Ca P330 Rinse mouth. P302+P352 IF ON SKIN: Wash w P312 Call a POISON CENTER/do P321 Specific treatment (see o	all a POISON CENTER/docto vith plenty of water/ octor/\u2026if you feel unwell n this label).	r/\u2026if you feel u	ınwell.		
Storage	P362+P364 Take off contaminated clothing and wash it before reuse.					
Disposal	P501 Dispose of contents/contain	ier to				
2.3Other hazards which do not resul	t in classification					
none						
3.Composition/information on ingred 3.1Substances	ients					
Chemical name	Common names and synonyms	CAS number	EC number	Concentration		
Iron(II) oxalate hydrate	Iron(II) oxalate hydrate	516-03-0	none	100%		
4.First-aid measures 4.1Description of necessary first-aid	measures					

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled .

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2Most important symptoms/effects, acute and delayed

Inhalation of dust may cause irritation of nose and throat. Ingestion causes burning pain in throat and stomach; mucous membranes turn white; can also cause vomiting, weak pulse, collapse, and death. Dust irritates eyes and may irritate skin on prolonged contact. (USCG, 1999)

4.3Indication of immediate medical attention and special treatment needed, if necessary

Basic treatment: Establish a patent airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations as needed. Administer oxygen by nonrebreather mask at 10 to 15 L/min. Monitor for shock and treat if necessary Anticipate seizures and treat if necessary For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with normal saline during transport Do not use emetics. For ingestion, rinse mouth and administer 5 ml/kg up to 200 ml of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool Cover chemical bums with dry, sterile dressings after decontamination /Oxalate and Related Compounds/

5.Fire-fighting measures

5.1Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2Specific hazards arising from the chemical

Special Hazards of Combustion Products: Iron fume or iron oxide fume may form in fire. (USCG, 1999)

5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. 6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7.Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2. 7.2Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Respiratory protection

Wear dust mask when handling large quantities. Thermal hazards

no data available

9.Physical and chemical properties	
Physical state	Odorless yellow powder.
Colour	no data available
Odour	no data available
Melting point/ freezing point	190\u00baC
Boiling point or initial boiling point and boiling	365.1\u00baC at 760 mmHg
range	
Flammability	no data available
Lower and upper explosion limit / flammability	no data available
limit	
Flash point	188.8\u00baC
Auto-ignition temperature	no data available
Decomposition temperature	no data available
рН	no data available
Kinematic viscosity	no data available

Solubilityno data availablePartition coefficient n-octanol/water (log value) no data availableVapour pressureno data availableDensity and/or relative density2.3Relative vapour densityno data availableParticle characteristicsno data available

10.Stability and reactivity
10.1Reactivity
no data available
10.2Chemical stability
Stable under recommended storage conditions.
10.3Possibility of hazardous reactions
Weak inorganic reducing agents, such as FERROUS OXALATE, react with oxidizing agents to generate heat and products that may be flammable, combustible, or otherwise reactive.
10.4Conditions to avoid
no data available
10.5Incompatible materials
Evolves carbon monoxide on heating
10.6Hazardous decomposition products
no data available

11.Toxicological information Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available Aspiration hazard no data available

12.Ecological information 12.1Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2Persistence and degradability no data available 12.3Bioaccumulative potential no data available 12.4Mobility in soil no data available 12.5Other adverse effects no data available

13.Disposal considerations 13.1Disposal methods Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information		
14.1UN Number		
ADR/RID: UN3288	IMDG: UN3288	IATA: UN3288
14.2UN Proper Shipping Name		
ADR/RID: TOXIC SOLID, INORGANIC, N.O.S.		
IMDG: TOXIC SOLID, INORGANIC, N.O.S.		
IATA: TOXIC SOLID, INORGANIC, N.O.S.		
14.3Transport hazard class(es)		
ADR/RID: 6.1	IMDG: 6.1	IATA: 6.1
14.4Packing group, if applicable		
ADR/RID: III	IMDG: III	IATA: III
14.5Environmental hazards		
ADR/RID: no	IMDG: no	IATA: no
14.6Special precautions for user		
no data available		
14.7Transport in bulk according to Annex II of MAR	POL 73/78 and the IBC Code	
no data available		

15.Regulatory information

15.1Safety, health and environmental regulations specific for the product in question 1

Chemical name	Common names and synonyms	CAS number	EC number
on(II) oxalate hydrate	Iron(II) oxalate hydrate	516-03-0	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
C Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
ietnam National Chemical Inventor	y A A A A A A A A A A A A A A A A A A A		Not Listed.
Chinese Chemical Inventory of Existing Ch <mark>emical</mark> Substances (China IECSC)			

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.