MSDS

FERRIC CHLORIDE

Section 1 – Product &Company Identification

Product Identification: SOLID FERRIC CHLORIDE; FERRIC CHLORIDE HEXAHYDRATE

Molecular Formula: $FeCl_3 \cdot 6H_2O$

Manufacturer's Name: HUIZHOU 3R ENVIRONMENTEL CHEMICAL CO.,LTD

Manufacturer's Address: LAOWEIXIA VILLAGE, YONGHU TOWN, HUIYANG DISTRICT, HUIZHOU CITY, GUANGDONG PROVINCE, P.R.C

ZIP: 516267

Manufacturer's Country: P.R.C

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Proprietary: N

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Section 2 –Hazards Identification

CHS CLASSIFICATION: ACUTE TOXICITY- CALIBER(CATEGORY 4)， SKIN CORROSION/ IRRITATION (CATEGORY IB), HAZARDOUS TO THE AQUATIC ENVIRONMENT- CHRONIC TOXICITY (CATEGORY 3);

GHS HAZARD STATEMENTS: H302 HARMFUL IF SWALLOWED

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

H312 HARMFUL TO AQUATIC ORGANISMS AND WITH LONG LASTING EFFECTS.

GHS LABEL SIGNAL WORDS: DANGER

GHS LABEL PROGRAMS:

Section 3- Composition /Information on Ingredients

PURE□ MIXTURE□

Chemical name: SOLID FERRIC CHLORIDE

THE HARMFUL INGREDIENTS	CONCENTRATION	CAS NO.
FERRIC CHLORIDE	58% -60%	10025-77-1

Section 4- First Aid Measures

Skin contact: IMMEDIATELY REMOVE CONTAMINATED CLOTHING, CLEAN WITH FLOW WATER.

Eye contact: IMMEDIATELY FILED EYELID, CLEAN WITH PLENTY OF WATER OR SALINE FOR AT LEAST 15 MINUTES, AND SEE A DOCTOR.

Ingestion: RINSE WITH WATER, DRINK MILK, DRINK EGG WHITE, AND SEE A DOCTOR.

Section 5- Fire Fighting Measures

Hazardous characteristics: A STRONG CORROSIVE.

Fire fighting methods and extinguishing agents: FIREFIGHTERS MUST WEAR FULL PROTECTIVE CLOTHING. NEUTRALIZATING WITH ALKALINE SUCH AS SODIUM BICARBONATE, SODIUM CARBONATE, HYDRATED LIME. PLENTY OF WATER CAN ALSO BE USED TO FIGHT THE BLAZE.

Section 6- Accidental Release Measures

WHEN THE FRRIC CHLORIDE LEAKING, THE SOLID PART IS COLLECT TO A PLASTIC CONTAINER, AND THE LIQUID PART CAN BE ABSORBED BY THE SPONGE, OR SOLVED BY MIXED SAND AND DRY LIME, ALSO CAN WASH WITH PLENTY OF WATER. THE WASHING WATER NEEDS TO BE DILUTED AND DISCHARGE INTO WASTEWATER TREATMENT SYSTEM. KEEP VENTILATION, NOT ALLOW WATER WET PACKINGS.

Section 7- Handling and Storage

Storage: STORED IN PLASTIC BAGS OR OTHER PLASTIC CONTAINERS. CONTAINERS SHOULD NOT BE MADE OF METAL MATERIALS LIKE IRON, ALUMINUM, COPPER AND STAINLESS STEEL. TRANSPORTED AND STORED SEPARATELY WITH ALKAILIS AND METAL POWDER. BE CAREFUL IN HANDLING WHEN TRANSPORT TO PREVENT DAMAGE OF PACKAGING AND CONTAIINERS. PACKING AND HANDLING OPERATION SHOULD PAY ATTENTION TO PERSONAL PROTECTION. STORAGE AREAS SHOULD HAVE EMERGENCY EQUIPMENT AND SUITABLE CONTAINERS TO COLLECT LEAKAGES.

Section 8- Exposure Controls & Personal Protection

Maximum allowable concentration: CHINESE MAC (mg/m3) NOT REGULA STANDARDS

Engineering controls: CLOSED OPERATION, PART EXHAUST. PROVIDE SAFETY SHOWER AND EYEWASH EQUIMENT.

Eye Protection: WEAR CHEMICAL SAFETY GLASSES.

Body protection: WEAR RUBBER ACID-PROOF CLOTHES.

Hand protection: WEAR RUBBER ACID-PROOF GLOVES.

Other protection: NO SMOKING, EATING AND DRINKING IN THE WORKPLACE, AFTER WORK, TAKE A SHOWER AND CHANGE THE CLOTHES. SEPARATE STORAGE THE

CONTAMINATED CLOTHING, WASHED AND STANDBY. KEEP A GOOD HEALTH HABITS.

Section 9- Physical & Chemical Properties

Appearance and properties: RED-BROWN SOLID, NON-VOLATILE
Melting point: (° C) 37 (PURE), **RELATIVE DENSITY (WATER = 1)**: 1.60
Boiling Point: (℃) 280 ~ 285, **RELATIVE VAPOR DESITY (AIR = 1)**: NOT HAVE ANY INFORMATION.
Heat of combustion (kJ / mol): MEANINGLESS
Octanol / water partition coefficient values: NOT HAVE ANY INFORMATION
Flash Point: MEANINGLESS. **Upper explosive limit% (V / V):** MEANINGLESS
Ignition temperature (℃): MEANINGLESS. **Lower explosive limit% (V / V):** MEANINGLESS.
Solubility: MISCIBLE WITH WATER, AND INSOLUBLE IN GLYCEROL, SOLUBLE IN METHANOL. ETHANOL, ACETONE, ETHER.

Section 10- Stability & Reactivity Data

Stability indicator: YES
Materials to avoid: STRONG OXIDIZING AGENTS, ALKALIS, POTASSIUM, SODIUM
Avoid contact conditions: MEANINGLESS.
Hazardous Polymerization: NOT POLYMERIZE.
Combustion (decomposition) products: CHLORIDE.

Section 11- Toxicological Information

Acute toxicity: LD50 1872MG/KG(PURE, FROM RAT MOUTH)
Irritant: NOT HAVE ANY INFORMATION

Section 12- Ecological information

Ecological Toxicity: NOT HAVE ANY INFORMATION
Biodegradability: NOT HAVE ANY INFORMATION
Non-biodegradability: NOT HAVE ANY INFORMATION

Section 13- Disposal Considerations

The waste kind: HAZARDOUS WASTE
Disposal methods: A CHEMICAL PROCESSING

Section 14- Transportation Information

Dangerous Goods Number: 81513
UN Number: 3260
Packing mark: 16 (CORROSIVE)
Packaging group: III
Packaging: CARTON PACKING, INSIDE WITH TWO LAYERS OF PE PLASTIC BAGS.
Transportation Note:

① USING STANDARD SHIPPING CONTAINERS TO MEET REQUIREMENTS, CHECK ING IF THE CONTAINER IS BROKEN AND THE DOOR IS INTACT. GUARANTEE THAT THE LOADING CONTAINER LEAVES FREE SOME SPACE INSIDE.

② THE VEICLES MUST HAVE THE TRANSPORTATION QULIFICATIONS OF DANGEROUS CHEMICALS, THE DRIVER MUST KNOW THE RELEVANT SAFETY KNOWLEDGE, COULD NOT OVERLOAD, OVERSPEEDING, AND SHOULD DRIVE FAR AWAY THE CROWD.

③ THE VEHICLES SHOULD BRING WITH A SMALL PLASTIC BUCKET (ABOUT 20 LITERS) AND ABSORBENT SPONGE, USED FOR COLLECTION AND CONTAINING LIQUID DRIPPING IN THE PROCESS OF LOADING AND UNLOADING, NOT ALLOW TO POLLUT THE GROUND.

Section 15- Regulatory Information

THE RELATION PROVISIONS ARE MADE FOR THE SAFE PRODUCTION OF THE HAZARDOUS CHEMICALS IN USING, STORAGE, TRANSPORT, HANDLING ETC. BY SAFETY MANAGEMENT REGULATIONS OF CHEMICAL DANGEROUS GOODS (ISSUED BY THE SATE COUNCIL ON 26TH JANUARY, 2002), 《REGULATIONS OF SAFETY USING CHEMICAL IN WORKPLACE》 ([1996] MINISTRY OF LABOR NO.423) AND OTHER LAWS AND REGULATIONS.

FERRIC CHLORIDE DIVIDED INTO 8.1CLASS CORROSIVE ACID BY 《GENERAL RULE FOR CLASSIFICATION AND HAZARD COMMUNICATION OF CHEMICALS》（GB13690-2009）,

THIS MANUAL WAS COMPILED BY ACCORDING TO RECOMMENDATION AND REQUIRMENTS OF NATIONAL STANDARDS《CHEMICALS DANGEROUS GOODS SAFETY TECHNOLOGY CONTENT AND SEQUENCE》(GB/T16483-2008) AND 《 THE GHS CHEMICAL LABELS NORMS》(GB / T 22234-2008).

Section 16- Other Information

References: 1.ZHOU GUO TAI, CHEMICALS DANGEROUS GOODS SAFETY TECHNOLOGY, CHEMICAL INDUSTRY PRESS, 1997.

Prepared By: HUIZHOU 3R ENVIRONMENTAL CHMEICAL CO., LTD.

Edit description: MANUAL WILL BE MODIFIED WHEN RELEVEANT DATES ARE CHANGED OR ADDED. THE INITIAL EDITION OF MANUAL WAS WROTED ON 21ST JANUARY, 2013.