

MATERIAL SAFETY DATA SHEET

FERROUS SULPHATE MONOHYDRATE

MANUFACTURE:CHANGSHA JINHUI CHEMICALS FACTORY

TELEPHONE:0731-5511772

ISSUED: JANUARY 28, 2006

TRADE NAME : Ferrous Sulphate Monohydrate

OTHER NAMES : Iron (II) Sulphate Monohydrate; Iron Vitrol; Green Vitrol; Ferrous Sulphate

U.N. NO. : None Allocated

DG CLASS : None Allocated

SUB RISK : None Allocated

HAZCHEM : None Allocated

PACKING GROUP : None Allocated

POISON SCHEDULE : None Allocated

USES : Water and sewage treatment; reducing agent; wood preservative; fertiliser.

PHYSICAL DESCRIPTION/ PROPERTIES

Appearance, odour : Light green crystalline solid, odourless.

Melting Point : 57°C

Boiling Point : >300°C decomposes

Specific Gravity (20°C) : Not Available

Vapour Density (air=1) : Not Available

Vapour Pressure (20°C) : Not Available

Flash Point (Closed cup) : Not Available

Flammability Limits (%) : Not Available

pH (10% solution) : Not Available

Solubility in water : Not Available

Molecular Formula : FeSO₄.H₂O

Stability and Reactivity : Stable under normal temperatures and pressures. Incompatible with alkalis, carbonates, gold salts, lead acetate, lime water, potassium, potassium iodide, silver salts,

sodium borate, sodium tartrate, tannin. Substance oxidises on contact with moisture to form ferric sulphate.

INGREDIENTS

Chemical Name CAS Number Proportion

Ferrous Sulphate 7720-78-7 >99.0%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

ACUTE EFFECTS :

SWALLOWED: Harmful if swallowed. Ingestion can result in nausea, vomiting, diarrhoea and abdominal pain. Ingestion of large doses can lead to cyanosis, pulmonary oedema and convulsions leading to coma. Evidence from animal tests indicate that repeated or prolonged exposure to this chemical could result in damage to liver and kidneys.

EYE: May cause mild eye irritation.

SKIN: May cause irritation to skin.

INHALED: Inhalation of dust may cause irritation to the respiratory tract.

CHRONIC EFFECTS: REPEATED EXPOSURE MAY INCREASE IRON LEVELS IN THE LIVER, SPLEEN AND LYMPHATIC SYSTEM. THIS COULD LEAD TO DAMAGE OF THE SPLEEN AND LIVER.

FIRST AID

SWALLOWED: If conscious wash out mouth with water and give water to drink. Do not induce vomiting. Seek immediate medical attention.

EYE: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek medical advice.

SKIN: Wash with plenty of soap & water. Remove contaminated clothing, launder clothes before reuse. If irritation persists seek medical advice.

INHALED: Remove victim from exposure to fresh air immediately. If not breathing apply artificial respiration. If breathing is difficult give oxygen. Seek immediate medical advice.

ADVICE TO DOCTOR

Treat symptomatically. Delayed pulmonary oedema may result.

TOXICITY

Oral LD50 (rat): 319 mg/kg

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

No value assigned for this specific material by the National Occupational Health and Safety

Exposure standard for iron salts as Fe:

TWA: 1mg/m³

ENGINEERING CONTROLS

Use adequate general or local exhaust ventilation to keep exposure levels below the recommended exposure standard.

PERSONAL PROTECTION

Avoid skin and eye contact and inhalation of dust. Wear overalls, eye protection & gloves. Use chemical safety goggles or face shield where dusting or splashing of solutions is possible. Use a dust mask or dust/mist respirator in dusty conditions. Always wash hands before smoking, eating, drinking or using the toilet.

FLAMMABILITY

Not flammable.

STORAGE AND TRANSPORT

Not defined as a Dangerous Good by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Store in a dry place. Store in well ventilated area. Keep away from incompatible materials.

SPILLS

Wear protective equipment to prevent skin and eye contamination and inhalation of dust. Sweep up but avoid generating dust. Collect and place in suitably labelled containers.

DISPOSAL

Refer to State Land Waste Management Authority.

FIRE/EXPLOSION HAZARDS

Non combustible product. Use extinguishing media appropriate for surrounding fire.

When heated to decomposition may produce toxic SOX fumes. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

ENVIRONMENTAL IMPACT

No data available.

Hazard Category: Harmful

RISK PHRASES: R22 HARMFUL IF SWALLOWED.

SAFETY PHRASES: S24/25 AVOID CONTACT WITH EYES AND SKIN. S22 DO NOT BREATHE DUST.

This MSDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.