



Columbus Chemical Industries, Inc.

Columbus, Wisconsin 53925 / 414-623-2140

MATERIAL SAFETY DATA SHEET

SECTION I

APR 6 1987

CHEMICAL NAME: Ferric nitrate
 PRODUCT NAME: Ferric nitrate
 DISTRIBUTOR'S NAME: Columbus Chemical Industries, Inc.
 ADDRESS: N4335 Temkin Road, Columbus, WI 53925
 EMERGENCY TELEPHONE NO.: (414) 623-2140 DATE PREPARED: July 1987

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME)	OSHA PEL (mg/M3)	ACGIH TLV (mg/M3)	C. A. S. NO.	%
Ferric nitrate (as Fe)	*	1.0	10421-48-4 (anhydrous) 7782-61-8 (nonahydrate)	

*Not established

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A SPECIFIC GRAVITY (H2O=1): 1.68
 VAPOR PRESSURE (mmHG): N/A MELTING POINT: 47 C
 VAPOR DENSITY (AIR=1): N/A EVAPORATION RATE
 SOLUBILITY IN WATER: soluble (BUTYL ACETATE=1): N/A
 APPEARANCE AND ODOR: Pale violet crystal, slight nitric acid odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD): N/A FLAMMABLE LIMITS: LEL N/A UEL N/A
 EXTINGUISHING MEDIA: Water
 SPECIAL FIREFIGHTING PROCEDURES: Self-Contained Breathing Apparatus
 should be used when firefighting in confined spaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Thermal decomposition may
 produce toxic oxides of nitrogen. Strong oxidizer. Contact with combustible
 material may cause fire.

SECTION V - REACTIVITY DATA

STABILITY: STABLE: X UNSTABLE: CONDITIONS TO AVOID: N/A
 INCOMPATIBILITY (MATERIALS TO AVOID): Easily oxidizable materials
 HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Thermal decomposition may
 produce toxic oxides of nitrogen.
 HAZARDOUS POLYMERIZATION: MAY OCCUR: WILL NOT OCCUR: X
 CONDITIONS TO AVOID: N/A

SECTION VI - HEALTH HAZARD DATA

PRODUCT: Ferric nitrate

TOXICITY: orl-rat LD50:3250mg/kg

ROUTE(S) OF ENTRY: INHALATION: X SKIN: X INGESTION:
CARCINOGENICITY: NTP: NO IARC MONOGRAPHS: NO OSHA REGULATED: NO

HEALTH HAZARDS (ACUTE & CHRONIC)/SIGNS AND SYMPTOMS OF EXPOSURE:

This product may cause irritation or acid burns to the eyes and skin. It may cause upper respiratory tract irritation. Ingestion of soluble iron salts may cause marked gastrointestinal irritation.

Liver damage, coma and death from iron poisoning has been recorded. Under some circumstances methemoglobinemia occurs in individuals when the nitrate is converted by bacteria in the stomach to nitrite.

SYMPTOMS: Coughing, sneezing, abdominal cramps, vomiting, diarrhea, black stool. Pink urine discoloration is a strong indicator of iron poisoning. Reddening and tearing of eyes can also occur.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Eye, Skin and Upper Respiratory Tract disorders. Persons with impaired liver or kidney may be more susceptible.

EMERGENCY AND FIRST AID PROCEDURES:

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth.

If breathing is difficult, give oxygen. Call a physician. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Neutralize with an alkaline material and flush with water to a wastewater treatment system.

WASTE DISPOSAL METHOD:

Flush with water to a wastewater treatment system or neutralize with an alkaline material and dispose of insoluble hydrate solid at an approved landfill. Observe local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in a cool dry area in closed containers. Keep away from combustible materials.

OTHER PRECAUTIONS:

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. Contact with other material may cause fire.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH/MSHA approved for dust

VENTILATION: Sufficient to control dust

PROTECTIVE GLOVES: Impervious

EYE PROTECTION: Side shield safety glasses or goggles

OTHER PROTECTIVE CLOTHING AND EQUIPMENT: Safety showers and eyewashes

WORK/HYGIENIC PRACTICES: Good housekeeping procedures should be followed to minimize dust.

SECTION IX - REFERENCES

Documentation of the Threshold Limit Values, 4th Ed., 1980, ACGIH