MANUFACTURER'S NAME: BUTLER SALES ASSOCIATES, INC.

P.O. BOX 8098

ST. JOSEPH, MO 64508

REGULAR TELEPHONE NO.: (404) 239-6700

EMERGENCY TELEPHONE NO.: Chemtrec 800-424-9300

TRADE NAME: Ferri-Floc SYNONYMS: Ferric Sulfate SHIPPING NAME(1):

DOT:

BAGS: Ferric Sulfate (Ferri-Floc) Not otherwise regulated.

BULK: Hazardous substance Solid n.o.s. IATA: (Ferric sulfate) ORM-E NA 9188 RO

II HAZARDOUS INGREDIENTS(2)

MATERIAL OR COMPONENT	<u>%</u>	HAZARD DATA
Ferric sulfate CAS NO.: 100-2822-5	89.0	Health Hazard: Product is corrosive to the eye, is not toxic dermally nor by inhalation or orally, may irritate the skin and mucous membranes.
Residual sulfuric acid * CAS NO.: 7664-93-9	<3.0	Aquatic Toxicity: Product is listed as toxic to aquatic life. Category C. 40 CFR Parts 116-118. PEL = 1 mg/m3 TWA as iron for soluble iron salts

^{*} Reportable under SARA of 1986 Title III Sec. 313 and 40 CFR Part 372

III PHYSICAL DATA

BOILING POINT, 760 MM HG: N.A. *

SPECIFIC GRAVITY (H2O = 1): 56-60 lbs/ft3

VAPOR DENSITY (AIR = 1) N.A. % VOLATILES BY VOL.: None

APPEARANCE AND ODOR: Grey to brown dry powder to granule.

MELTING POINT: N.A. VAPOR PRESSURE: N.A.

SOLUBILITY IN H2O % BY WT: 55% by weight EVAPORATION RATE (BUTYL ACETATE = 1): N.A.

pH (AS IS): N.A. - dry powder

pH (1% SOLN.): (distilled water pH 4.8) a 1% wgt. solution in distilled water has pH 2.1.

IV FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD): None

AUTOIGNITION TEMPERATURE: None known FLAMMABLE LIMITS IN AIR, % BY VOLUME:

LOWER: N.A. UPPER: N.A.

EXTINGUISHING MEDIA: Product does not burn. If product is present in a fire, water, CO2, or dry chemical may be used. SPECIAL FIRE FIGHTING PROCEDURES: If water is used, the product is water soluble and water may be acid, and water should not be allowed to enter a navigable stream. At temperatures above 600 deg C, product decomposes to iron oxide and sulfur trioxide.

UNUSUAL FIRE AND EXPLOSION HAZARD: None known.

HEALTH HAZARD DATA/ROUTES OF EXPOSURE:

INHALATION:

HAZARD CLASSIFICATION: Not toxic by inhalation according to OSHA regulations. Dust of soluble salts may cause mucous membrane irritation.

BASIS FOR CLASSIFICATION:

Test results on product

Acute inhalation LC50 (rats) = In excess of 147.9 mg/L of air.

SOURCE: Determined by Toxicological Laboratory test on product.

SKIN CONTACT:

HAZARD CLASSIFICATION: May cause skin irritation.

BASIS FOR CLASSIFICATION: OSHA set 8 hr. TWA-PEL at 1 mg/m3 as iron for soluble iron salts.

SOURCE: OSHA regulations

Federal Register Vol. 54 (12) Jan. 19, 1989, p. 2466.

SKIN ABSORPTION:

HAZARD CLASSIFICATION: Not toxic dermally. In accordance with OSHA regulations.

BASIS FOR CLASSIFICATION:

Test results on product

Acute dermal LD50 (rabbits) (Male) In excess of 2 g/kg body wt.

(Female) 2.0 g/kg body wt.

SOURCE. Determined by Toxicological Laboratory test on product.

EYE CONTACT:

HAZARD CLASSIFICATION: Corrosive to the eye. In accordance with OSHA regulations.

BASIS FOR CLASSIFICATION:

Test results on product

Eve irritation scores:

24 hrs. 45.2 72 hrs. 56.3

48 hrs. 56.2 7 days 63.4

SOURCE: Determined by Toxicological Laboratory test on product.

INGESTION:

HAZARD CLASSIFICATION: Not toxic orally according to OSHA regulations.

BASIS FOR CLASSIFICATION:

Test results on product

Acute oral LD50 (rats) = Between 1 - 2.5 g/kg body wt.

SOURCE: Determined by Toxicological Laboratory test on product.

EFFECTS OF OVEREXPOSURE:

ACUTE OVEREXPOSURE: Dusty. May cause coughing, irritate lungs and mucous membranes. May be corrosive to the eye if not removed by washing. Also see Sec. V above.

CHRONIC OVEREXPOSURE: None known except as listed above. Prolonged dust inhalation may cause lung mottling and irritation of mucous membranes.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Irrigate eyes with large amounts of water for at least 15 minutes. Hold eyelids apart during irrigation.

Send patient to a physician immediately.

SKIN: Wash with water. Remove shoes if in a shower.

Remove and wash clothes before reuse.

INHALATION: Remove worker from exposure and seek medical aid.

INGESTION: Treat as a corrosive liquid. Drink large quantities of water or milk to reduce concentration. Seek medical aid immediately.

NOTES TO PHYSICIAN:

1. See references 1 and 2

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2. See instructions and references 1 to 8.

* N.A. = Not Applicable

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