

FRIT INDUSTRIES, INC.

P.O. BOX 1589, OZARK, AL 36361-1589

PHONE: 334/774-2515

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MATERIAL SAFETY DATA TECHNICAL INFORMATION

SECTION 1—PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: F-287 G

PRODUCT IDENTIFICATION NUMBER (PIN): N.Ap.

PRODUCT USE: FERTILIZER MICRONUTRIENT FOR BLENDING FOR SOIL APPLICATION.

MANUFACTURER'S NAME: FRIT INDUSTRIES, INC.

SUPPLIER'S NAME: SAME

STREET ADDRESS: JODIE PARKER ROAD

STREET ADDRESS: SAME

CITY: OZARK

PROVINCE: ALABAMA

CITY: SAME

PROVINCE: SAME

POSTAL CODE: USA 36360

POSTAL CODE: SAME

EMERGENCY PHONE NO: 334/774-2515

EMERGENCY PHONE NO: SAME

SECTION 2—HAZARDOUS INGREDIENTS

**HAZARDOUS
INGREDIENT**

%

**CAS
NUMBER**

**LD₅₀ OF INGREDIENT
(SPECIFY SPECIES & ROUTE)**

**LC₅₀ OF INGREDIENT
(SPECIFY SPECIES)**

Manganese Oxide

70-75

1344430

1000 mg/kg IPR-MUS

N.Av.

Manganese Sulfate

25-30

7785877

332 mg/kg IPR-MUS

N.Av.

SECTION 3—PHYSICAL DATA

PHYSICAL STATE: Solid granular

ODOUR AND APPEARANCE: Slight metallic odor; brown granule

ODOUR THRESHOLD (ppm): N.Ap.

VAPOUR PRESSURE (mm Hg): N.Ap.

VAPOUR DENSITY (AIR=1): N.Ap.

EVAPORATION RATE: N.Ap.

BOILING POINT (C): N.Ap.

FREEZING POINT (C): N.Av.

PH: N.Av.

SPECIFIC GRAVITY: N.Av.

COEFF.WATER/OIL DIST.:N.Ap.

SECTION 4—FIRE AND EXPLOSION DATA

FLAMMABILITY:

IF YES, UNDER

(NOTE: In case of fire, water should be impounded to avoid washing into waterways.)

___ YES ___ X NO

WHICH CONDITIONS:

MEANS OF EXTINGUISHMENT: N.Ap.

FLASHPOINT (C) AND METHOD: N.Ap.

UPPER FLAMMABLE LIMIT (% BY VOLUME): N.Ap.

LOWER FLAMMABLE LIMIT (% BY VOLUME): N.Ap.

AUTOIGNITION TEMPERATURE (C): N.Ap.

HAZARDOUS COMBUSTION PRODUCTS: Metal fumes, oxides of sulphur

EXPLOSION DATA: N.Ap.

SENSITIVITY TO IMPACT: N.Ap.

SENSITIVITY TO STATIC DISCHARGE: N.Ap.

N.Ap. = not applicable

N.Av. = not available

SECTION 5—REACTIVITY DATA

CHEMICAL STABILITY: IF NO, UNDER WHICH CONDITIONS?
 YES NO

INCOMPATIBILITY WITH OTHER SUBSTANCES:
 YES NO IF SO, WHICH ONES?

REACTIVITY, AND UNDER WHAT CONDITIONS? None known

HAZARDOUS DECOMPOSITION PRODUCTS: None known

SECTION 6—TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:
 SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT: Can cause chills and/or fever, irritation of skin, eyes, and respiratory system.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: Can cause damage to respiratory, central nervous, and blood systems.

EXPOSURE LIMITS: MnO = 5 mg Mn/m³
Source: ACGIH, TWA MnSO₄ = 5 mg Mn/m³

IRRITANCY OF PRODUCT: Skin - rash; eyes - irritation; respiratory – coughing.

SENSITIZATION TO PRODUCT: No evidence

CARCINOGENICITY: No evidence.

TERATOGENICITY: No evidence.

REPRODUCTIVE TOXICITY: No evidence.

MUTAGENICITY: No evidence.

SYNERGISTIC PRODUCTS: No evidence.

SECTION 7—PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES (SPECIFY): Heavy duty, leather gloves.

RESPIRATOR (SPECIFY): Approved NIOSH 3M8210 or better.

EYE (SPECIFY): Non-vented goggles.

FOOTWEAR (SPECIFY): Shoes.

CLOTHING (SPECIFY): Coveralls.

OTHER (SPECIFY): N. Ap.

ENGINEERING CONTROLS (SPECIFY, EG. VENTILATION, ENCLOSED PROCESS): Adequate ventilation to keep dust below exposure limits.

LEAK AND SPILL PROCEDURE: Avoid generating dust. Shovel or sweep up and reuse.

WASTE DISPOSAL: Empty containers and materials used in cleanup spills should be disposed of in accordance with Canadian laws.

HANDLING PROCEDURES AND EQUIPMENT: Avoid generating dust. Do not inhale dust. Avoid contact with skin and eyes. Wear protective equipment. Wash thoroughly after handling.

STORAGE REQUIREMENTS: Keep in dry area. Avoid spillage of bulk material or tearing of bags.

SPECIAL SHIPPING INFORMATION: N. Ap.

SECTION 8—FIRST AID MEASURES

SPECIFIC MEASURES: Inhalation – Remove to fresh air; seek medical attention.

Skin – Flush with soap and water. Contact physician if irritation develops.

Eyes – Flush with water for 15 minutes. Contact physician if irritation develops.

Ingestion – Contact physician immediately.

SECTION 9—PREPARATION DATE OF MSDS

PREPARED BY: Frank M. Dabney

PHONE NUMBER: 334/774-2515

DATE: July 27, 2000

