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KEY FEEDS DF Manganese

Material Safety Data Sheet (rev.11/04)

SECTION I

PRODUCT IDENTIFICATION

NFPA HAZARD RATINGS

HEALTH HAZARD 1 FIRE HAZARD 0 REACTIVITY 0
Based on the National Fire Protection Association rating system
(0 = Minimal; 1 = Slight; 2 = Moderate; 3 = High; 4 = Severe)

SARA/ TITLE III HAZARD CATEGORIES

Immediate (ACUTE) Health: NO Reactive Hazard: NO

Delayed (Chronic) Health: YES Fire Hazard: NO Sudden Release of Pressure: NO

Company Name: STOLLER USA, INC.

Address: 4001 W. Sam Houston Parkway, N., Suite 100

Houston, Texas 77043-1226 U.S.A.

Emergency Phone Number: CHEMTREC: In the U.S. and Canada call Toll- free: 1 (800) 424-9300

From other countries call collect: +1 (703) 527-3887

Phone Number for Information: 1 (800) 539-5283 or 1 (713) 461-1493

Chemical Family: NÀ - Mixture

Chemical Name & Synonyms: Mixture of Manganese Sulfate into complexing agent.

Formula: Proprietary

Trade name & Synonyms: Key Feeds DF Manganese

SECTION II COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENTS: CAS# Approx. % TLV

SECTION III HAZARD IDENTIFICATION

A. EXPOSURE LIMITS:

- 1. OSHA Permissible Exposure Limit (PEL): N/A
- 2. Threshold Limit Value (TLV): N/ A

B. CARCINOGEN OR POTENTIAL CARCINOGEN:

- 1. NPT: No
- 2. IARC: No
- 3. OSHA: No

$\hbox{C. EFFECTS OF OVEREXPOSURE: SIGNS \& SYMPTOMS NOF EXPOSURE:} \\$

Possible irritation to eyes, nose and throat. Large doses may cause nausea, vomiting and diarrhea. Systemic oral toxicity is extremely rare and has consisted of acidosis and hypocalcemia tetanus.

1. ACUTE: EYES: N/ A SKIN: N/ A INHALATION: N/ A INGESTION: N/ A 2. CHRONIC: N/ A

D. **ADDITIONAL INFORMATION:** Decontamination procedure: Wash with water.

SECTION IV

FIRST- AID MEASURES

A. EMERGENCY FIRST AID PROCEDURES:

EYES: Rinse thoroughly with water. If irritation occurs and persists, obtain medical attention.

SKIN: Wash thoroughly with soap and water.

INHALATION: Remove victim from exposure to fresh air. If breathing difficulties occur, get medical attention. **INGESTION:** Rinse mouth and dilute stomach contents with water, or preferably with milk if available if victim is conscious. Seek medical attention.

- B. ANIMAL TOXICITY DATA: N/A
- C. **ADDITIONAL INFORMATION:** Decontamination procedure: Wash with water.

SECTION V

FIRE AND EXPLOSION DATA

FLASH POINT: Non Flammable

FLAMMABLE LIMITS: Non Flammable LEL: NA UEL: NA

EXTINGUISHER MEDIA: All methods necessary to fight surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: None UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

SECTION VI ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED: Material should be contained and placed in dry containers. The material can be disposed of by spreading on the soil as a fertilizer not to exceed 80 lbs per acre.

SECTION VII HANDLING AND STORAGE

Store in dry area for product quality assurance. Material is hygroscopic.

SECTION VIII SPECIAL PROTECTION / CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH/ MSHA approved respirator if airborne dust is expected.

VENTILATION: Suggested.

WORK/ HYGIENIC PRACTICES: Usual good warehouse keeping procedure. Wash thoroughly after handling.

SECTION IX PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: Not VAPOR PRESSURE Non volatile

Known (mm/ Hg):

MELTING POINT: 253° C VAPOR DENSITY (air = Non volatile

1):

SPECIFIC GRAVITY: 1.95 REACTIVITY IN N/A

WATER:

SOLUBILITY IN WATER: Complete. EVAPORATION RATE: N/ A

APPEARANCE AND ODOR: Brown powder with sweet odor.
PERCENT VOLATILE BY VOLUME: N/ A

OTHER: Insoluble in Alcohol.

SECTION X PHYSICAL HAZARDS (REACTIVITY DATA)

STABILITY: Stable: Yes Unstable:

CONDITIONS TO AVOID:

INCOMPATIBILITY, MATERIALS TO AVOID:

HAZARDOUS DECOMPOSITION PRODUCTS:

POLYMERIZATION CONDITIONS TO AVOID:

None

MAY OCCUR: WILL NOT OCCUR: X

SECTION XI

TOXICOLOGICAL INFORMATION

- A. TOXICITY DATA:
- B. CARCINOGENICITY:
- C. MUTAGENICITY:
- D. REPRODUCTIVE TOXICITY:

SECTION XIII DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Consult Federal, State, and local regulations.

SECTION XIV TRANSPORTATION DATA

PROPER SHIPPING NAME: Key Feeds DF Manganese

DOT HAZARD CLASS: Non Regulated

PLACARD: None

IATA Proper Shipping Name: N/ A
IMO Proper Shipping Name: N/ A

UN: None

Label Requirement: None