



SAFETY DATA SHEET

1. GENERAL INFORMATION

Trade Name: 4% Manganese

Chemical Name: 4% Manganese (Mn)

Address: C.O.G. Marketers, LTD.
3055 W. M-21
St. Johns, MI 48879

Contact: Product Development Manager

Phone: (989) 224-4117 or 1-800-678-9029
After Business Hours - (989) 640-4096

2. HAZARDS IDENTIFICATION

GHS – Classification: Signal Word: Warning
Pictogram: GHS07



Health: Inhalation: If misty condition prevails, may irritate.

Ingestion: Large doses of ammonium salts may give diarrhea or diuresis. Low oral toxicity.

Skin: Low skin irritation potential. (pH 6.8 to 7.2)

Eyes: Low eye irritation potential. (pH 6.8 to 7.2)

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is classified as not hazardous under OSHA regulations.

4. FIRST AID MEASURES

Eye Contact: Flush eyes immediately and thoroughly with water for at least 15 minutes. If irritation persists, get medical attention.

Skin Contact: Flush skin immediately and thoroughly with water. If irritation persists, get medical attention.

Inhalation: Generally not considered an inhalation hazard.

Ingestion: If conscious, immediately give large quantities of water and induce vomiting. Consult a physician.

5. FIRE-FIGHTING MEASURES

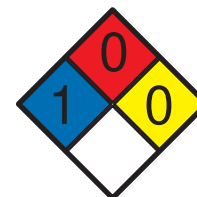
Unusual fire and explosion hazards: When heated, it may give off ammonia fumes (this material is a fire retardant).

Fire extinguishing agents recommended: All standard agents are acceptable.

Special fire-fighting precautions: Due to possible evolution of ammonia, wear self-contained breathing apparatus approved by NIOSH. Use water spray to keep containers cool.

NFPA HAZARD RATING:

| | |
|------------|----------------|
| 0 Least | |
| 1 Slight | 1 Health |
| 2 Moderate | 0 Flammability |
| 3 High | 0 Reactivity |
| 4 Severe | |



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment.

Cleanup: Soak up with inert absorbent material. A vacuum truck may also be used. Keep in a suitable closed container for disposal.

7. HANDLING AND STORAGE

Normal Handling: Avoid breathing mist, if any should be formed. Minimize contact of liquid with eye, skin, and clothing. Use good personal hygiene and housekeeping.

Storage: Avoid using containers, pipes and fittings made of aluminum, mild steel, zinc-clad or, copper bearing alloys.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation: Unless heated to evolve ammonia or misted by heat, agitation, or spraying, natural ventilation should be adequate.

Spill or Leak: Contain spills and maximize recovery. Cleanup promptly into a container.

(Caution should be exercised in the area of spilled material since it can cause a slippery condition.)

Respiratory Protection: Respirators are not required under normal ventilated conditions.

Eyes and Face: Safety glasses are recommended.

Hands, Arms, & Body: Rubber coated gloves and clothing which minimize skin exposure are recommended if there is prolonged or repeated exposure of skin to liquid.

9. PHYSICAL DATA

Color: Faint pink.

Form: Liquid.

Odor: Odorless.

pH: 6.8 to 7.2

Specific Gravity: 1.246

Weight: 10.40 lbs/gal

Freezing Point: 20°F

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: Avoid extreme temperature changes.

Incompatibilities: Avoid mixing with products containing boron, calcium, magnesium, and large amounts of ammonium sulfate as these will form crystalline fallout after a short period of time. Always perform a jar test to determine compatibility.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eye Contact. Ingestion. Inhalation.

Toxicity Data: Not determined.

Chronic Toxic Effects: Carcinogenic Effects: Not determined.

Mutagenic Effects: Not determined.

Teratogenic Effects: Not determined.

Developmental Effects: Not determined.

There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate existing medical conditions.

Acute Toxic Effects: Not determined.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not determined.

Other Ecotoxicological Advice: No ecological data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal of Material: Dispose of in accordance to national, state, and local regulations.

14. TRANSPORT INFORMATION

DOT: Not regulated.

IATA: Not regulated.

IMDG: Not regulated.

15. REGULATORY INFORMATION

Canada: WMIS Hazard Class: Not determined.

DSL: All components either exempt or listed on DSL.

United States: SARA 313: Not applicable.

SARA 311/312: Not applicable.

TSCA: All components either exempt or listed on TSCA inventory.

OSHA: Classified as not hazardous under OSHA regulations.

Mexico – Grade: No information available.

International Regulations: CWC: This product does not contain any component(s) listed under the CWC Schedule of Chemicals.

16. OTHER INFORMATION

Legend: DOT: Department of Transportation (US)
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
WHMIS: Workplace Hazardous Material Information System
DSL: Domestic Substances List
SARA: Superfund Amendments and Reauthorization Act
TSCA: Toxic Substances Control Act
OSHA: Occupational Safety and Health Administration
AICS: Inventory of Chemical Substances
CWC: Chemical Weapons Convention

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Disclaimer: The information provided on this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The given information is to be used only as a guide for safe handling, use, storage, transportation, and disposal and is not to be considered as a warranty or quality specification. The information relates only to the specified material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.