May 2, 2001

# Material Safety Data Sheet

**Product Name: FERROMEC AC Liquid Iron 15-0-0**

**MSDS No.:** 970-6 **Version No.:** 014 **EPA Registration No.:** N/A

## 1. Basic Information:

**Manufacturer:** PBI/Gordon Corporation
**Address:** 1217 West 12th Street
**City, State Zip:** Kansas City, MO 64101-1407
**Information Contact:** Environmental, Health, & Safety Dept.
**Information Telephone Number:** (816)421-4070
**Emergency Contact:** Chemtrec
**Emergency Telephone Number:** (800)424-9300




| | |
|---|---|
| 1 | Health |
| 0 | Flammability |
| 0 | Reactivity |
| B | Pers. Protection |

**Last Update:** 10/2/00

**Chemical State:** [X] Liquid [ ] Gas [ ] Solid
**Chemical Type:** [ ] Pure [X] Mixture

## 2. Ingredients:

[ ] Trade Secret *(ND = Not Disclosed)*

| CAS No. | Chemical Name | % Range | EHS | NTP | IARC | SUB Z | SARA 313 | OSHA PEL | ACGIH TLV | Other Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 7720787 | Ferrous sulfate | 16.3 | N | N | N | N | N | 1mg/m3Fe | 1mg/m3Fe | 1mg/m3Fe |
| 7664939 | Sulfuric acid | <6 | Y | N | N | Y | N | 1 mg/m3 | 1 mg/m3 | 1 mg/m3 |
| 57136 | Urea | 32.6 | N | N | N | N | N | NI | NI | NI |

## 3. Hazardous Identification:

**Hazard Catagory:**
[X] Acute [X] Chronic [ ] Fire [ ] Pressure [ ] Reactive

**Hazardous Identification Information:**

## 4. First Aid Measures:

**Route(s) of Entry:**
Contact, inhalation, ingestion.

**Health Hazards (Acute and Chronic):**
EYES: May cause irritation and burns to the eyes.

SKIN: Contact may cause irritation.

INHALATION: May irritate respiratory tract.

INGESTION: May irritate gastrointestinal tract; may be harmful if swallowed.

**Signs and Symptoms:**
NI

**Medical Conditions Generally Aggravated by Exposure:**
NI

**Emergency First Aid Procedure:**
EYES: Flush eyes with large quantities of clean water for 10-15 minutes, holding lids open. If irritation persists, seek medical attention.

SKIN: Bathe and shampoo with soap and water to remove chemical from skin and hair. If irritation persists, seek medical attention. Launder contaminated clothing separately, prior to reuse.

INHALATION: Remove victim to fresh air. Apply artificial respiration if needed. Seek medical attention.

INGESTION: Do not induce vomiting. Call a physician or Poison

First Aid Measures (Continued)

Control Center.

**Other Health Warnings:**
NI

## 5. Fire Fighting Measures:

**Flash Point:** >205°F **F.P. Method:**
**Lower Explosive Limit:** NI
**Upper Explosive Limit:** NI

**Fire Extinguishing Media:**
The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H, and, therefore, would not be classified as a combustible liquid. Foam, $CO_2$, dry chemical, or water may be used on a fire in the same area as this product.

**Special Fire Fighting Procedures:**
None.

**Unusual Fire and Explosion:**
None.

## 6. Accidental Release Measures:

**Steps to be Taken in Case Material is Released or Spilled:**
See Section 8 for Personal Protective Equipment. Contain spill with absorbent; collect into drums for proper disposal. Cover and label the drums. Flush area with water, if possible.

## 7. Handling and Storage:

**Precautions to be Taken:**
Store in original container in a locked area inaccessible to children and pets. Avoid storage at temperatures of 110°F or higher. Keep from freezing.

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Handling and Storage (Continued)

Corrosive to steel, aluminum, brass. Use with stainless steel or PVC fittings.

Product may stain unfinished wood, painted surfaces or concrete.

Do not reuse container; rinse thoroughly before discarding.

**Other Precautions:**
NI

## *8. Exposure Controls/Personal Protection:*

**Ventilation Requirements:**
Good local ventilation.

**Personal Protective Equipment:**
PROTECTIVE CLOTHING: Wear long sleeves and pants; chemical-resistant gloves and shoes with socks.

EYE PROTECTION: Safety glasses with side shields or safety goggles.

RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a NIOSH approved respirator with any R, P or HE filter.

## *9. Physical and Chemical Properties:*

**Boiling Point:** 250°F **Melting Point:** NI

**Evaporation Rate (Butyl Acetate = 1) :** <1

**Vapor Pressure (mm Hg.):** <17@25°C

**Vapor Density (Air = 1):** >1

**Specific Gravity (H20 = 1):** 1.36000

**Solubility in Water:** Infinitely soluble.

**Appearance and Odor:** Green liquid; no discernible odor.

**Other Information:**
pH: 2.1-2.5
Density: 11.5 pounds/gallon
Viscosity: >1cp at 25°C
Freezing point: 23°F

## *10. Stability and Reactivity:*

**Stability:**
Stable.

**Incompatibility (Materials to Avoid):**
Contact with strong bases may ruin this product.

**Decomposition/By-Products:**
NI

**Hazardous Polymerization:**
Will not occur.

## *11. Toxicological Information:*

No toxicological data available.

## *12. Ecological Information:*

NI

## *13. Disposal Considerations:*

Container Disposal: Do not reuse container. Rinse thoroughly before discarding in trash.

## *14. Transport Information:*

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: Fertilizing Compounds, NOI - NMFC #68140, sub 6

In our current available sizes, this product does not qualify as a Hazardous Material.

## *15. Regulatory Information:*

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: All the ingredients in this mixture are on the TSCA Chemical Substances Inventory.

CERCLA REPORTABLE QUANTITY: 6135 pounds of the formulation which contains 1000 pounds of Ferrous Sulfate.

SARA TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: Sulfuric Acid
SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard, Delayed Health Hazard
SECTION 313 TOXIC CHEMICALS: Sulfuric Acid CAS# 7664-93-9

RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

## *16. Other Information:*

REASON FOR ISSUE: To revise MSDS to the ANSI Z400.1-1998 format

NOTE: NI means not indicated.

The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibiltiy. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or becuase of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.