

## MATERIAL SAFETY DATA SHEET

FERRO Code Number: 33-61025  
MSDS Rev.: 06-APR-1999

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MSDS Print Date

**SECTION I - PRODUCT AND COMPANY INFORMATION**

Product Name: ORANGE LETDOWN  
CAS Number MIXTURE  
HMIS Hazard Rating: Health: 1 Fire: 1 Reactivity: 0 PPI:

Company Identification: Ferro Corporation  
L. C. & D. Division  
54 Kellogg Court  
Edison NJ 08817

Contact: Dave Malysa  
Telephone/Fax: 732-287-1930 732-287-1943  
Emergency Phone (24 Hour): FERRO'S Emergency Telephone  
1-216-641-5324  
Chemtrec (24 Hour): 1-800-424-9300  
Preparer: Dave Malysa  
Regulatory & Environmental Affairs

Trade Name ORANGE LETDOWN

**SECTION II - HAZARDOUS INFORMATION**

Ingredient Name	CAS Number	Percent
(No hazardous ingredients known at this time.)		

**SECTION III - PHYSICAL DATA**

Boiling Point: Not Available  
Vapor Pressure (mmHg): 1.@ 68.°F  
Evaporation Rate:  
% Volatile Weight Not Applicable  
% Volatile Volume Not Applicable  
Specific Gravity: 1.182

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

Flammability Class  
Flash Point: 198.°F  
Pensky-Martens Closed Cup ASTM D 93  
Explosive Range: Not Available

**EXTINGUISHING MEDIA:**

Use foam, carbon dioxide or dry chemical

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## SPECIAL FIREFIGHTING PROCEDURES

Extinguish flame from perimeter inward to main body of fire.  
Extinguisher Media: ABC Extinguisher, Carbon Dioxide, Foam, Water.  
Special fire fighting procedures:  
Water or foam may cause frothing when applied to liquids with flash points above 100 degrees C. The frothing may be quite violent and endanger the life of the firefighter particularly when solid streams are directed into the hot burning liquid.  
ESTER POLYOL: Firefighters must be equipped to prevent inhalation of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing.  
UNUSUAL FIRE & EXPLOSION HAZARDS:

## SECTION V - HEALTH HAZARD DATA

### PERMISSIBLE EXPOSURE LEVEL:

See Section VIII.

### FIRST AID:

INHALATION: If inhaled, move individual to fresh air. Keep as comfortably warm but not hot. Use oxygen or artificial respiration as required. See a physician if irritation is present or persists.

SKIN: In case of contact, remove contaminated clothing. Wash thoroughly with soap & plenty of water. See a physician if irritation is present or persists. Launder contaminated clothing before reuse.

EYE: Immediately flush eyes with plenty of water for at least 15 minutes and get prompt medical attention.

INGESTION: If swallowed, call a physician immediately. Induce vomiting only at the instructions of a physician. Never give anything by mouth to an unconscious person.

## SECTION VI - STABILITY AND REACTIVITY DATA

Stability: This product is stable  
Hazardous Polymerization: Hazardous polymerization will not occur

### INCOMPATIBILITY:

ESTER POLYOL: Strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.

### CONDITIONS TO AVOID:

Keep materials with ester polyol from strong oxidizers.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce carbon dioxide and carbon monoxide.

## SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

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Confine spill. Transfer to secure containers where necessary. Collect using absorbent media. Flush area with hot water and detergent.

## WASTE DISPOSAL METHOD:

Dispose of in accordance with Federal, State and Local regulations.

## SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA
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### RESPIRATORY PROTECTION:

Where dust may be present, an approved NIOSH/MSHA dust respirator is recommended.

### VENTILATION:

Mechanical Ventilation Suggested.

### PROTECTIVE GLOVES:

Chemical workers gloves is recommended.

### EYE PROTECTION:

Chemical goggles as needed to prevent eye contact.

### OTHER PROTECTIVE EQUIPMENT:

Practice good hygiene, wash hands and face before eating or smoking. Launder clothing before reuse.

## SECTION IX - SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Avoid contact with eyes, skin, clothing. Avoid breathing dust or spray. Use with good ventilation. Wash thoroughly after use. Store in cool, dry area in closed containers away from incompatible materials. Store away from sunlight, heat, sparks and open flames. Do not smoke in work area. Do not store near food or feedstuffs.

### OTHER PRECAUTIONS:

Since emptied containers retain product residues (vapor, liquid, solid), all hazard precautions listed in the MSDS should be observed.

## SECTION X - REGULATORY INFORMATION

### DISCLAIMER:

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable to represent the most reasonable current opinion on the subject at the time the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary.

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This product, either alone or in combination  
determine its environmental regulatory co  
under any applicable federal or state laws.