

**MATERIAL SAFETY DATA SHEET**

Product Code Number: 33-40380

Rev.: 06-APR-1999

MSDS Print Date: 06/05/00

**SECTION I - PRODUCT AND COMPANY INFORMATION**

Product Name: GREEN  
 Number: MIXTURE  
 Hazard Rating: Health: 1 Fire: 1 Reactivity: 0 PPI: X

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

Contact: Dave Malysa  
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 1-216-641-5324  
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 Preparer: Dave Malysa  
 Regulatory & Environmental Affairs

Product Name: GREEN

**SECTION II - HAZARDOUS INFORMATION**

Ingredient Name	CAS Number	Percent	TSCA
Pigment Green 7	Copper	1328-53-6	10 - 30
Cyanine Green			

ALL Ingredients in this product are listed in the T.S.C.A. Inventory

**Additional Ingredient Information:**

Copper	7440-50-8	1.0 mg/m3	1.0 mg/m3
Hazardous Compounds of:	CAS NO.	ACGIH/TLV	OSHA/PEL

**SECTION III - PHYSICAL DATA**

Boiling Point: Not Available  
 Vapor Pressure (mmHg): 1.0 @ 68.°F  
 Evaporation Rate:  
 Volatile Weight: Not Applicable  
 Volatile Volume: Not Applicable  
 Specific Gravity: 1.143

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

Flammability Class

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Flash Point: 198.°F  
Pensky-Martens Closed Cup

Explosive Range: Not Available

**EXTINGUISHING MEDIA:**

Use foam, carbon dioxide or dry chemical

**SPECIAL FIREFIGHTING PROCEDURES**

Extinguish flame from perimeter inward to main body of  
Extinguisher Media: ABC Extinguisher, Carbon Dioxide, Foam  
Special fire fighting procedures:

Water or foam may cause frothing when applied to liquid  
flash points above 100 degrees C. The frothing may be  
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  
ing of vapors or products of combustion. Wear an appropriate  
contained breathing apparatus and protective clothing.

**UNUSUAL FIRE & EXPLOSION HAZARDS:**

If in a dust form Copper when improperly handled may lead to  
dust cloud formation which may be an explosion hazard.

PTHALOCYANINE GREEN: When involved in a fire or exposed to  
high temperatures for an extended period of time, organic  
pigments may smolder or burn evolving noxious fumes which  
include oxides of nitrogen & carbon, or other toxic compounds.

**SECTION V - HEALTH HAZARD DATA****PERMISSIBLE EXPOSURE LEVEL:**

See Section VIII.

**EFFECTS OF OVEREXPOSURE:**

Overexposure to copper compounds through ingestion may cause  
gastric disturbances. Dust inhalation may cause irritation  
of the respiratory tract.

**FIRST AID:**

Inhalation of Copper dust: Remove to clean, fresh air and  
treat symptomatically.

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

SKIN: In case of contact, remove contaminated clothing and  
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.

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**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:**

**Copper Compounds:** Strong oxidizing Agents.  
**ESTER POLYOL:** Strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.  
**PHTHALOCYANINE GREEN:** Avoid strong oxidizing agents such as peroxides, chlorates, perchlorates, nitrates, & permanganates. Oxidizing materials may vigorously evolve oxygen in large amounts.

**CONDITIONS TO AVOID:**

Keep materials with ester polyol from strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

**COPPER COMPOUNDS:** When involved in a fire, burning organic pigments may evolve noxious fumes which may include Carbon monoxide, nitrous oxides or other toxic compounds, depending on the pigment type.

Combustion will produce carbon dioxide and carbon monoxide.

**PHTHALOCYANINE GREEN:** When involved in a fire or exposed to high temperatures for an extended period of time, organic pigments may smolder or burn evolving noxious fumes which can include oxides of nitrogen and carbon, or hydrogen chloride, depending of the pigment type.

**SECTION VII - SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

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 STEL	OSHA
C. I. Pigment Green 7					
Phthalocyanine Green					
	N/est	N/est	N/est	N/est	N/est

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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:**

Copper Compounds: Impervious clothing should be worn when gross contact is likely, such as when cleaning up spills of large amounts.

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 vapor, mist or spray. Use with good ventilation. Wash thoroughly after handling. 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 feed.

**OTHER PRECAUTIONS:**

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

**SECTION X - REGULATORY INFORMATION**

-PROP 65 (BOTH CARCINOGEN AND TERATOGEN)

**WARNING:** This product may contain a chemical known to the state of California to cause cancer or birth defects or other reproductive harm.

Ingredient Name	CAS Number	Percent
C. I. Pigment Green 7 Phthalocyanine Green	Copper 1328-53-6	10 - 30

May contain traces of Polychlorinated Biphenyls (PCB's).

**MASSACHUSETTS SUBSTANCE LIST:**

Copper compounds are listed.

Phthalocyanine Green may contain traces of Polychlorinated Biphenyls (PCB's).

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## 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 to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.