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MATERIAL SAFETY DATA SHEET

FERRO Code Number: 11-38010
MSDS Rev.: 26-MAY-2004

MSDS Print Date: 02/07/05

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: BLUE
CAS Number MIXTURE

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

Trade Name BLUE

SECTION II - HAZARDOUS INFORMATION

Ingredient Name	CAS Number	Percent	TSCA Inv
Unsaturated Polyester	Trade Secret	60 - 100	Y
C.I. Pigment Blue 15 (Copper Phthalocyanine Blue)	147-14-8	10 - 30	Y

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

Contains the following Trade Secret Number:
NJ TSRN: 800986-5106P

SECTION III - PHYSICAL DATA

Boiling Point: Unknown Not Available
Vapor Pressure (mmHg): Not Available
Evaporation Rate: Not Available
% Volatile Weight Not Available
% Volatile Volume Not Available
Specific Gravity: 1.069

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class
Flash Point: >100 Deg. C TCC 212.°F
Tag Closed Cup
Explosive Range: Not Available

EXTINGUISHING MEDIA:

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Foam, Dry Chemical, CO2

SPECIAL FIREFIGHTING PROCEDURES

PREVENT runoff from entering streams, sewers or drinking water supply. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment/clothing. Treat as oil fire. Fight fire from a distance; sealed containers can rupture explosively when heated. Water may be used to keep fire-exposed containers cool until fire is out.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Combustion can produce toxic gases.

PHTHALOCYANINE BLUE: 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 other toxic compounds.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL:

See Section VIII.

EFFECTS OF OVEREXPOSURE:

UNSATURATED POLYESTER:

If ingested may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting and diarrhea. Contact with the skin may cause skin irritation. Repeated dermal exposures can result in an eczematous dermatitis caused by primary irritation and/or sensitization. Repeated or prolonged exposure to high vapor concentrations may be irritating to the mucous membranes and upper respiratory tract.

FIRST AID:

INHALATION: If inhaled, move individual to fresh air. Make 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 may occur

Avoid exposure to excessive heat, peroxides and polymerization catalysts.

INCOMPATIBILITY:

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POLYESTER: Strong acids, peroxides, oxidizing agents.
 PHTHALOCYANINE BLUE: Avoid strong oxidizing agents such as peroxides, chlorates, perchlorates, nitrates, & permanganates. Oxidizing materials may vigorously evolve oxygen in large amounts.

CONDITIONS TO AVOID:

POLYESTER: Avoid exposure to heat, open flame or contamination with oxidizing agents. Dissolution of material with uninhibited unsaturated monomers can result in exothermic autopolymerization.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of Carbon; incompletely burned hydrocarbons.

Toxic Fumes.

PHTHALOCYANINE BLUE: 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 (HCl), depending on the pigment type.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Confine spill. Remove all sources of ignition. Ventilate area and maintain ventilation. Use all described protective measures and equipment. Use absorbant material, such as clay or sand, to collect and contain for salvage and disposal. Prevent runoff from entering drains, sewers or waterways.

WASTE DISPOSAL METHOD:

Follow all applicable Federal, Provincial, State and Municipal laws, regulations and by-laws. Package in U.N. approved containers and transport to an approved treatment, storage and disposal (TSD) facility. (Also see Section X.)

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
Unsaturated Polyester	N/est	N/est	N/est	N/est	N/est
C.I. Pigment Blue 15 (Copper Phthalocyanine Blue)	N/est	N/est	N/est	N/est	N/est

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 Particulates not otherwise classified/regulated may be subject to:

ACGIH/TLV	OSHA/PEL
10 mg/M3	Total 15 mg/M3
3 mg/M3	Resp. 5 mg/M3

RESPIRATORY PROTECTION:

Use appropriate NIOSH/MSHA approved respiratory protection when

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exposure to airborne contaminants may exceed acceptable limits. In emergency situations, or when used in confined spaces, use self-contained breathing apparatus or other air supplied full-face respirator.

VENTILATION:

Ventilate to maintain exposure below published exposure limits. Use explosion proof motors and wiring.

PROTECTIVE GLOVES:

Use impervious butyl rubber gloves. Replace as often as needed to maintain protection.

EYE PROTECTION:

Use chemical safety goggles or full-face shield.

OTHER PROTECTIVE EQUIPMENT:

Eye wash stations & safety showers should be easily accessible. Where splash can occur, use protective clothing.

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. Protect containers against physical damage. 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

DISCLAIMER:

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when 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.