#### MATERIAL SAFETY DATA SHEET

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FERRO Code Number: 33-21055

MSDS Rev.: 06-JAN-2006 MSDS Print Date: 10/01/08 \_\_\_\_\_\_

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name: YELLOW CC BLEND 1320

CAS Number MIXTURE

Company Identification: Ferro Corporation

L. C. & D. Division 54 Kellogg Court Edison NJ 08817

Contact:
Telephone/Fax:
Telephone (24 Hour):

Temergency Phone (24 Hour):

Chemtrec (24 Hour):

Dave Malysa

Contact:

732-287-1930 732-287-1943

FERRO'S Emergency Telephone
1-216-641-5324

1-800-424-9300

Dave Malysa

Contact:

732-287-1943

FERRO'S Emergency Telephone
1-216-641-5324

Chemtrec (24 Hour):

Dave Malysa

Contact:

732-287-1930 732-287-1943

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Chemtrec (24 Hour):

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Contact:

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Contact:

Dave Malysa

Dave Malysa

Regulatory & Environmental Affairs

YELLOW CC BLEND 1320 Trade Name

SECTION II - HAZARDOUS INFORMATION

Ingredient Name	CAS Number	Percent	TSCA Inv
Titanium Dioxide	13463-67-7	10 - 30	Y
C.I. Pigment Yellow 42 (Iron Oxide)	51274-00-1	10 - 30	Y
Aluminum Hydroxide		0.5 - 1.5	Y

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

SECTION III - PHYSICAL DATA

Boiling Point:

Vapor Pressure (mmHg):

Evaporation Rate:

Volatile Weight

Volatile Volume

Specific Gravity:

Not Applicable

Not Applicable

1.722

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class

Flash Point: 388.4°F Tag Open Cup

Explosive Range: Not Available

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# EXTINGUISHING MEDIA:

Use foam, carbon dioxide or dry chemical

SPECIAL FIREFIGHTING PROCEDURES

PREVENT runoff from entering streams, sewers or drinking water supply.

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 having 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 breathing of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing.

# SECTION V - HEALTH HAZARD DATA

### PERMISSIBLE EXPOSURE LEVEL:

See Section VIII.

EFFECTS OF OVEREXPOSURE:

IRON OXIDE:

ACUTE: May cause mechanical skin and eye irritation.

CHRONIC: Repeated and prolonged inhalation of iron oxide dust is known to cause siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis-producing materials such as silica. The TLV is set to protect against siderosis.

TITANIUM DIOXIDE: Results of a Dupont epidemiology study showed that employees who had been exposed to Titanium Dioxide pigments were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium Dioxide pigments. Based on the results of this study Dupont concluded that TiO2 pigments will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the work place.

May cause eye, skin and respiratory tract irritation.

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

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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:

Iron Oxides are not compatible with hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

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 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 Li ACGIH TLV	lmits ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
Titanium Dioxide 10.00 mg/M3	N/est	N/est	N/est	10.00 mg/M3
C.I. Pigment Yellow 42 (5.00 mg/M3	(Iron Oxide) N/est	N/est	N/est	10.00 mg/M3
Aluminum Hydroxide 10.00 mg/M3	N/est	N/est	N/est	15.00 mg/M3
Amorphous Silica 10.00 mg/M3	N/est	N/est	N/est	6.00 mg/M3

Iron Oxide PEL (as fume) and TLV (as dust and fume).

RESPIRATORY PROTECTION:

Where dust may be present, an approved NIOSH/MSHA dust

respirator is recommended.

VENTILATION:

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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 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

Although Iron Oxides themselves are not listed under Prop. 65, this product may contain trace amounts of chemicals which appear on the State of California's listing of substances known to cause cancer or birth defects or other reproductive harm. (Proposition 65). MASSACHUSETTS SUBSTANCE LIST:

Trace quantities of substances which are listed on the Massachusetts Hazardous Substance List may be found in this product. **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.