MATERIAL SAFETY DATA SHEET

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FERRO Code Number: 33-20740

MSDS Print Date: 06/05/00 MSDS Rev.: 06-APR-1999

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name:

YELLOW

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

Preparer

Dave Malvsa

Regulatory & Environmental Affairs

Trade Name

YELLOW

SECTION II - HAZARDOUS INFORMATION

Ingredient Name

CAS Number Percent TSCA In

C.I. Pigment Yellow 14

5468-75-7 7 - 13

Y

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

SECTION III - PHYSICAL DATA

Boiling Point:

Not Available

Vapor Pressure (mmHg):

1.@ 68.°F

Evaporation Rate:

Not Applicable Not Applicable

% Volatile Weight % Volatile Volume

Specific Gravity:

1.087

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:

Pag

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Use foam, carbon dioxide or dry chemical SPECIAL FIREFIGHTING PROCEDURES

Extinguish flame from perimeter inward to main body of fire.

Estinguisher 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 selfcontained breathing apparatus and protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARDS:

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL:

See Section VIII.

EFFECTS OF OVEREXPOSURE:

At temperatures exceeding 240 degrees C, Diarylide pigments may give off traces of 3,3'-Dichlorobenzidine which is classified as a suspe carcinogen by NTP and IARC, and is regulated by OSHA as a suspect carcinogen.

FIRST AID:

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

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

If swallowed, call a physician immediately. Induce INGESTION: 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:

Do not use in polymers at temperatures exceeding 200 degrees C.

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Keep materials with ester polyol from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:

The decomposition of Diarylide pigments in polymers heated above 200 degrees C can produce trace amounts of monoazo dyes, which could decompose producing Aromatic Amines. As the temperatures reach the 240-300 degree C range, trace quantities of 3,3'-Dichlorobenzidine can be found. (3,3'-Dichlorobenzidine is classified as a suspect carcinogen by NTP and IARC, and is regulated by OSHA as a suspect carcinogen.)

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 ræegulations.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits ACGIH TLV ACGIH TLV-C ACGIH STEL OSHA STEL OSHA PI

C.I. Pigment Yellow 14

2.00 mg/M3 N/est N/est N/est 5.00

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

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Store in cool, dry area in closed containers away from : materials. Store away from sunlight, heat, sparks and o Protect containers against physical damage. Do not smol area. Do not store near food or feed. OTHER PRECAUTIONS:

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

SECTION X - REGULATORY INFORMATION

C.I. Pigment Yellow 14

-PROP 65 (BOTH CARCINOGEN AND TERATOGEN)

WARNING: This product may contain a chemical known of California to cause cancer or birth defects or other harm. Ingredient Name CAS Number

May contain traces of Polychlorinated Biphenyls (PCB's), DISCLAIMER:

The information and recommendations contained in this Ma

Data Sheet have been compiled from sources believed to h to represent the most reasonable current opinion on the the MSDS was prepared. No warranty, guaranty or represe made as to the correctness or sufficiency of the information user of this product must decide what safety measures an

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