FERRO Code Number: 86-100150
MSDS Rev.: 22-OCT-2002 MSDS Print Date: 12/05/06

SECTION I - PRODUCT AND COMPANY INFORMATION

Product Name:	Hi-UV Clear Gelcoat
CAS Number	MIXTURE
HMIS Hazard Rating:	Health: 2* Fire: 3 Reactivity: 2 PPI: J

Company Identification:	Ferro Corporation Liquid Coatings & Dispersions 1301 N. Flora Street Plymouth IN 46563
Contact:	James C. Heim
Telephone/Fax:	(574) 935-5131 (574) 935-5278
Emergency Phone (24 Hour):	Ferro Corporation (216) 641-5324
Chemtrec (24 Hour):	(800) 424-9300
Preparer	Ken Rados Environmental Engineer

Trade Name	Hi-UV Clear Gelcoat
UN Class	3
UN Number	1866
UN Pack Group	III
Shipping Name	Resin Solution (Contains Styrene Monomer, inhibited)

SECTION II - HAZARDOUS INFORMATION

Ingredient Name	CAS Number	Percent	TSCA Inv
Unsaturated Polyester	TRADE SECRET	30 - 60	Y
Styrene Monomer	100-42-5	30 - 60	Y
Methyl Methacrylate Monomer	80-62-6	1 - 5	Y
Amorphous Fumed Silica	112945-52-5	1 - 5	Y

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

Additional Ingredient Information:

Styrene may contain trace amounts of Benzene (CAS# 71-43-2) as an impurity.
Naphtha-Light Aromatic (CAS# 64742-95-6) contains:
1,2,4-Trimethylbenzene, Xylene and Cumene

SECTION III - PHYSICAL DATA

Appearance/Color:	Pink
Solubility (in water):	Negligible
Boiling Point:	100.°C - 145.°C (212.°F - 293.°F)
Vapor Pressure (mmHg):	4.5@ 68.°F (20.°C)
Evaporation Rate:	Slower than n-Butyl Acetate
% Volatile Weight	48.89%
% Volatile Volume	57.%
Specific Gravity:	1.056

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class	IC
Flash Point:	83.°F - 89.°F (28.33°C - 31.67°C) Tag Closed Cup
Explosive Range:	1.1% 12.5%

EXTINGUISHING MEDIA:
Foam, Dry Chemical, CO2
SPECIAL FIREFIGHTING PROCEDURES
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:
Flammable liquid. Vapors may form explosive mixture with air. Can polymerize when heated. Combustion can produce toxic gases. Vapors are heavier than air, can travel along the ground or through ventilation systems, and be ignited by sparks, flames or static discharge.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL:
See Section VIII.
EFFECTS OF OVEREXPOSURE:
Styrene & MMA are skin, nose and respiratory tract irritants, and can cause allergic skin rashes. Skin permeation may occur. Both are severe eye irritants and can cause stinging, tearing, blurring of vision, redness and swelling, and possible corneal damage. Inhalation can cause central nervous system (CNS) depression with headache, nausea, dizziness, lung irritation with cough, discomfort & shortness of breath, and other CNS effects.
Methyl Methacrylate (MMA) exposure can cause abnormal kidney function tests and temporary elevation of blood pressure.
High levels of Styrene (1000 ppm) can cause anesthetic effects. May be fatal at 10,000 ppm Styrene.
IARC has classified Styrene as a possible carcinogen (Class 2B).

There is currently not sufficient evidence to indicate that Styrene is a human carcinogen. The IARC 2B classification is based on animal data generated on Styrene Oxide. Styrene Oxide is a metabolite of Styrene.
Ingestion causes a burning sensation of the mouth and throat, and gastrointestinal tract irritation.
NAPHTHA-LIGHT AROMATIC:
ACUTE:
Inhalation - High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination, and fatigue).
Eye & Skin - Repeated or prolonged contact may cause irritation.
Ingestion - Repeated ingestion may irritate the digestive tract.
CHRONIC:
Absorption of ingredients by inhalation and/or repeated skin contact may cause injury to the liver/kideny. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage.
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.
NOTE TO PHYSICIAN: Vomiting can cause aspiration of the liquid into the lungs, which can cause chemical pneumonitis, which can be fatal.

SECTION VI - STABILITY AND REACTIVITY DATA
Stability: This product is stable
Hazardous Polymerization: Hazardous polymerization may occur

INCOMPATIBILITY:
Styrene is incompatible with strong acids & bases, peroxides, oxidizers, aluminum chloride and metallic hydrides.
Methyl Methacrylate is incompatible with oxidizing and reducing agents. MMA is a strong solvent and can soften paints & rubber.
CONDITIONS TO AVOID:
Avoid excessive heat and inadvertent addition of catalyst.
HAZARDOUS DECOMPOSITION PRODUCTS:
Oxides of Carbon; incompletely burned hydrocarbons.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Styrene Monomer has a Reportable Quantity (RQ) = 1000 lbs.
Methyl Methacrylate has a Reportable Quantity (RQ) = 1000 lbs.
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.)
Unused product and cleaned-up material may be RCRA Hazardous Waste (D001, D003).

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
Styrene Monomer	20.00 PPM	N/est	40.00 PPM	100.00 PPM	50.00 PPM
Methyl Methacrylate Monomer	50.00 PPM	N/est	100.00 PPM	N/est	100.00 PPM
Amorphous Fumed Silica	10.00 mg/M3	N/est	N/est	N/est	6.00 mg/M3
Naptha - Light Aromatic	50.00 PPM	N/est	N/est	N/est	400.00 PPM

RESPIRATORY PROTECTION:
Use appropriate NIOSH/MSHA approved respiratory protection when 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:
DO NOT STORE ABOVE 100 degrees F (38 degrees C)!
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! Avoid improper addition of promotor and/or catalyst. Consult product bulletin. Promotors (metal organics such as Cobalt, or Analine type) and catalyst (organic peroxide type) used with this product, should always be premixed separately into the product.
** NEVER MIX PROMOTORS & CATALYST DIRECTLY TOGETHER **

SECTION X - REGULATORY INFORMATION

SARA TITLE III SECTION 313:
This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Ingredient Name	CAS Number	Percent
Styrene Monomer	100-42-5	44.35
Methyl Methacrylate Monomer	80-62-6	4.00
Cobalt Compound (as Cobalt)	N/A	0.01

Although Styrene Monomer is not listed under Prop. 65, trace amounts of Benzene may be present as an impurity. (<0.05%)

MASSACHUSETTS SUBSTANCE LIST:
Styrene (CAS# 100-42-5) is listed.
CERCLA - 40 CFR 302.4:

Styrene Monomer has a Reportable Quantity (RQ) = 1000 lbs.
Methyl Methacrylate has a Reportable Quantity (RQ) = 1000 lbs.
RCRA - 40 CFR 261:
Wastes containing Styrene Monomer and Methyl Methacrylate (MMA) in a liquid form may exhibit EPA Hazardous Waste Characteristics, D001 (ignitability) and D003 (reactivity).
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.