

Material Safety Data Sheet

Low VOC Gel Coats

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Product Name: Low VOC Gel Coats
Part Number: MFGC (Series)
D.O.T. Proper Shipping Name: Resin Solution, 3, UN1866, PGII

Section 1 - Manufacturer Identification

Manufacturer's Name: Distributed by Michigan Fiberglass Sales
Address: 19795 East Nine Mile Rd.
St. Clair Shores, MI 48080
Emergency Phone: 800-424-9300 Date Printed: 01/19-04
Information Phone: 586-777-2032 Name of Preparer: Chris Blicharz

Section II - Hazardous Ingredients / SARA III Information

Reportable Components	CAS Number	Vapor Pressure Mm Hg @ Temp	Weight Percent
* Styrene	100-42-S	4.5 70	29.0
OSHA TWA: 50 PPM	;ACGIH TWA 20 PPM		
CERCLA RQ 1000 lbs	;DOT RQ: 3336 lbs		

- Indicates toxic chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

Note: A zero in the weight percent column indicates that there is less than one -half of one percent present.
Warning: There are certain Health Hazards involved with handling and storing this material. Please read and follow the Safety recommendations put forward on this MSDS.

Section III - Physical / Chemical Characteristics

Boiling Range: 295 deg F
Vapor Density: Heavier than air
Specific Gravity (H20=1): 1.38
Evaporating Rate: Slower than either
Coating VOC: 3.34 lb / gl
Material V.O.C.: 3.34 lb / gl

The VOC is calculated using the assumption that ONE HUNDRED percent of the styrene monomer will Evaporate. You should use the emissions factor approved by the Regulatory Agency responsible for air quality in your area for reporting the emissions of MONOMERS.

Solubility in Water: negligible
Appearance and odor: Polyester Coating with characteristic styrene odor

Section IV - Fire and Explosion Hazard Data

Flash point: 90 deg F
Method Used: TCC
Flammable Limits in air by volume- Lower: 1:1
Upper: 6.1
Extinguishing Media: Foam, CO2, Dry Chemical, Water Fog
Special Firefighting Procedures:

Wear full protective equipment including SELF-CONTAINED BREATHING APPARATUS. If water is used, fog nozzles are preferable. Water may be used to cool containers. Styrene vapors are uninhibited and may form polymers in the vents or flame arrestors of storage tanks rendering them useless. These vents should be inspected frequently for blockage. Vapors may cause flash fires. Keep storage containers tightly closed and isolated from heat, electrical equipment, sparks and flames

Section V - Reactivity Data

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Stability: Stable

Conditions to avoid

Avoid Heat, Sparks or open flames. Never allow the Promotor / Accelerator to come in direct contact with the CATALYST (When mixed in a undiluted form, cobalt and peroxide will react violently and cause an explosion). Do not use plastic or non conducting containers to store and handle flammable liquids. These containers can not be properly grounded and static charge may build up in the flammable liquid.

Incompatibility (Materials to avoid)

Avoid Contact with strong acids, oxidizers (bleaches), and strong bases (caustic soda).

Hazardous Decomposition or Byproducts

If ignited this product will release carbon dioxide, carbon monoxide, and some organic acids. Do not breathe fumes.

Hazardous Polymerization: may occur

Section VI - Health Hazard Data

Inhalation Health Risk and Symptoms of Overexposure

WARNING: Based on studies of components similar to the ones used in this coating, it has been shown that Acrolein (TLV: 0.1) and Acetaldehyde (TLV: 100 ppm) can be released during the curing of this product.

The excessive inhalation of vapors may cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, and headaches.

The symptoms of inhalation exposure are very similar to common complaints caused by colds and other minor medical problems and must be monitored scrupulously to detect the appearance of overexposure.

Skin and eye contact health risks and symptoms of overexposure

Eye contact: This material can be irritating to the eyes. The symptoms of this are tearing, redness, and discomfort.

Skin contact: This material may cause severe skin irritation. Symptoms include redness, burning drying and cracking.

Skin absorption health risks and symptoms of overexposure

Exposure by skin contact can cause severe skin irritation. Prolonged or repeated exposure may induce redness, burning, and cracking of the skin. Skin absorption is possible but no adverse effects are expected from this route of exposure under normal conditions of handling use.

Ingestion health risks and symptoms of overexposure

Swallowing can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of the liquid material can cause pneumonia which can be fatal. Care should be taken that aspiration DOES NOT OCCURE SHOULD THE VICTIM VOMIT.

Health Hazards (acute and chronic)

Reports have associated repeated or prolonged occupational exposure to solvents with permanent brain and nervous system damage, and liver or kidney atrophy. Intentional misuse by concentrating and inhaling the vapors can be fatal. This material has not been tested as a whole for health effects. WARNING! Although all intentional PROP 65 chemicals will be listed, THERE MAY BE DECTABLE LEVELS OF UNINTIONAL CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR OTHER REPRODUCTIVE HARM PRESENTIN THIS PRODUCT.

Target organ information:

Overexposure to this material has been suggested as a cause of the following effects in laboratory animas, and may aggravate preexisting disorder of these organs in humans: mild, reversible kidney effects on hearing respiratory tract damage, testis damage, and liver damage. Overexposure to this material has been suggested as a cause of the following effects in humans and may aggravate pre-existing disorders of these organs: central nervous system effects, effects on hearing, respiratory tract damage.

Carcinogenicity:

NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

PROPOSITION 65: Yes

WARNING: Toluene is an impurity in Xylene. This product contains toluene a chemical known by the state of California to cause birth defects or other reproductive harm: WARNING: Benzene is an impurity in styrene at levels less than one tenth of one percent. This product contains benzene which is a chemical known by the state of California to cause Cancer. WARNING: Based on the study of components similar to the ones used in this coating, it has been shown that acetaldehyde (TLV: 100 ppm) can be released during the curing of this product. Acetaldehyde is known by the state of California to cause cancer.

WARNING! The international Agency for Research on cancer states that styrene is 'possibly carcinogenic to Humans' (group 2B) based on 'inadequate evidence' in humans, 'limited evidence' in animals, and other 'relevant data'.

THIS MATERIAL CONTAINS OSHA REGULATED HAZARDOUS MATERIALS.

Medical conditions generally aggravated by exposure

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Respiratory problems such as asthma; Skin disorders such as dermatitis or overly sensitive eyes.

Emergency and first aid procedures

For any overexposure move victim to fresh air and seek medical aid. Eye contact: Immediately flush eyes with warm clean water. If symptoms persists seek medical attention. Skin contact: Immediate flush contaminated skin with water using mild soap if necessary. Remove all contaminated clothing and do not reuse clothes until thoroughly clean. Inhalation overexposure: Where breathing has stopped give artificial respiration. If breathing is difficult have qualified persons give medical oxygen. Ingestion: Give victim water to dilute chemical. NEVER induce vomiting in an unconscious or convulsing victim. Aspiration of this material may occur during vomiting and can lead to lung damage or death. Seek immediate medical help.

Section VII - Precautions for safe handling and use**Steps to be taken in case material is released or spilled**

Evacuate personnel, remove sources of ignition, provide ventilation, equip clean-up crew with safety equipment, contain the spill with dikes, then use an absorbent or vacuum equipment to remove material. Store waste in a sealed container. Use only non-sparking tools during clean up. Do not allow this material to flow into the environment. If the spill exceeds the reportable quantity notify EPA and DOT officials.