FREEMAN Manufacturing & Supply Company

Safety Data Sheet

Orange Tooling Gelcoat

miapoxy

Section 1 Identification

Product identifiers

Product name: Orange Tooling Gelcoat

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Tooling Gelcoat – For Industrial Use Only

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company
1101 Moore Road, Avon, OH 44011
Phone (440) 934-1902
Email contactus@freemansupply.com

24 Hour Emergency Phone Number
CHEMTREC: (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

Flammable Liquids, Category 3
Acute Toxicity, Inhalation, Category 4
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Irritation, Category 2
Carcinogenicity, Category 2
Reproductive Toxicity, Category 1B
Specific Target Organ Toxicity, Single Exposure, Category 3
Specific Target Organ Toxicity, Repeated Exposure, Category 1

Signal Word: Danger

Hazard Statements

H226 Flammable liquid and vapor
H304 May be fatal if swallowed and enters airways
H317 May cause an allergic skin reaction.
H372 Causes damage to organs through prolonged or repeated exposure. (central nervous system, hearing organ, visual organ, color vision effect)
H360 May damage fertility or the unborn child
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H302 Harmful if swallowed.
H332 Harmful if inhaled.

Precautionary Statements

Prevention: P201 Obtain special instruction before use.
P202 Do not handle until all safety precautions have been read and understood.
P210+P235 Keep away from heat/sparks/open flames/hot surface. No smoking. Keep cool.
P240 Ground/Bond container and receiving equipment.
P241 Use explosion proof electrical equipment.
P242 Use only non-sparkling tools.
P243 Take precautionary measures against static discharge.

Section 2 Hazards Identification continued

P260 Do not breathe vapours.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves
P282 Wear face shield & eye protection.
P284 Wear respiratory protection.
Response: P304+P340 If inhaled: remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes.
Remove contact lenses if present and easy to do. Continue rinsing.
P312 Call a poison center or a doctor if you feel unwell.
P308+P313 If exposed or concerned : Get medical attention
P301+P330+P331+P310 If swallowed: Rinse mouth. Do not induce vomiting. Immediately call a doctor.
P302+P352 If on skin: Wash with plenty of water.
P337+P313 If eye irritation persists: get medical advice.
P362+P364 Take off contaminated clothing and wash it before reuse.
Storage: P233 Keep container tightly closed
P403 Store in a well ventilated place.
P410 Protect from sunlight.
Disposal: P501 Dispose of contents and container to an appropriate waste site in accordance with local and national regulations.

Hazards not otherwise classified

Cobalt 2-Ethyl hexanoate 12% has been recently listed by IARC as possibly carcinogenic to humans (group 2B). This listing is based on inadequate evidence of carcinogenic in humans and sufficient evidence in experimental animals.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
Styrene monomer	100-42-5	30 - 36
Methanol	67-56-1	0.1 – 1.0
Cobalt bis(2-ethylhexanoate) 12%	136-52-7	0.1 – 1.0

Section 4 First Aid Measures

Inhalation: Remove victim to fresh air and keep comfortable for breathing. Call a physician immediately.
Eye contact: Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Call a physician. Continue rinsing. If eye irritation persists or advised by physician, get medical attention.
Skin contact: Wash with plenty of soap and water. Rinse with shower. Take off contaminated clothing and wash it before reuse. If irritation persists, get medical attention.
Ingestion: Aspiration hazard if swallowed. Can enter lungs and cause damage.
Do not induce vomiting, rinse mouth. Consult a physician.

Most significant signs and symptoms of exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or absorption through the skin may include: nausea, vomiting, diarrhea, irritation of the nose, irritation of the throat, irritation of the airways, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), central nervous system effects (loss of coordination, confusion), and liver damage.

Section 5 Fire-Fighting Measures

Suitable extinguishing media: Alcohol-resistant foam, dry chemicals, or carbon dioxide. May use water spray or fog.
Unsuitable extinguishing media: Do not use strong water stream.
Specific hazards arising from the chemical

On combustion, styrene releases carbon, carbon monoxide and carbon dioxide.

Special protective actions for fire-fighter

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat.

NFPA Classification (NFPA 30-2008): 1C
National Building Code of Canada: 1C

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition (flames, hot surfaces and electrical, static, or friction sparks). Avoid breathing vapors. Ventilate area. Attention! Contaminated absorbent or used absorbent may heat and ignite a fire. Keep it outside and put some water in the container.

Environmental precautions

Prevent entry into waterways, sewers, (risk of fire or explosion). When there is a spill, in the presence of water, the styrene will float because specific gravity is lower than water. Styrene is weakly soluble in water.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use non-sparking tools. Transfer to properly labeled metal containers and add water. Contaminated absorbent may heat and ignite a fire, store outside until it can be sent to a proper disposal facility.

Section 7 Handling and Storage

Precautions for safe handling

Do not store above 100°F (37.8°C). Keep away from heat, sparks and flame. Keep containers closed when not in use and upright to prevent leakage. Wash hands after using and before smoking or eating.

Conditions for safe storage

Containers should be grounded when pouring. Wash hands after using and before smoking or eating.
Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks and flames.
Do not cut, puncture or weld on or near emptied containers. Use explosion proof electrical equipment.
Follow all hazard precautions given in this data sheet until container is thoroughly cleaned or destroyed.
Do not mix residues of this product with any other petroleum wastes.

Additional information

Hazardous polymerization can occur. Spontaneous polymerization will be accompanied by evolution of heat, which may cause release of styrene vapors forming flammable mixtures with air and a potential fire or explosion.
Closed containers may rupture/explode during runaway polymerization.
Product can accumulate electrostatic charges that may cause fire by electrical discharges.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

	OSHA PEL		ACGIH TLV	
	TWA 8-hour	PEL-Ceiling	TWA 8-hour	STEL
Styrene 100-42-5	100 ppm	200 ppm	10 ppm	20 ppm
Methanol 67-56-1	200 ppm	Not established	200 ppm	250 ppm

Section 8 Exposure Controls/Personal Protection

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits.

Personal Protective Equipment

Eye/face protection: Safety glasses equipped with side shields, chemical goggles, or face shields.
Hand protection: Wear Polyvinyl alcohol or Viton gloves. Contaminated gloves should be replaced.
Body protection: Prevent skin contact when handling material. Wear long-sleeved overalls or coveralls.
Respiratory protection: Wear a cartridge or autonomous respirator if the concentration in ppm exceeds recommended exposure standard. These devices, however, require that the user has received appropriate training.

General Hygienic Practices

Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling.
Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Translucent orange viscous liquid
Odor / Odor threshold	Aromatic, styrene / 0.14 ppm
pH	Not applicable
Melting point	-30.6°C (-23.1°F)
Initial boiling point	145°C (293°F)
Flash point (Pensky-Marten)	32°C (90°F)
Evaporation rate	No data available
Flammability (solid, gas)	Flammable liquid
Lower flammability limit	1.1% by volume
Upper flammability limit	6.1% by volume
Vapor pressure	4.5 mmHg@ 20°C
Decomposition temperature	Not applicable
Vapor density	3.6
Relative density (g/cc)	1.2±0.1
Solubility	0.29 g/L @ 20°C
Auto-ignition temperature	490°C (914°F)
Viscosity	Thixotropic
Explosive properties	Vapors may form explosive mixture with air
Partition coefficient n-octanol/water	0.00112

Section 10 Stability and Reactivity

Reactivity: Not considered self-reactive.
Chemical stability: These products are stable under recommended storage conditions
Possibility of hazardous reactions: Hazardous polymerization may occur with an exothermic reaction.
Conditions to avoid: Elevated temperatures. Improper addition of promoter and/or catalyst. Avoid direct contact of methylethylketone peroxide catalyst (MEKP) with accelerator (cobalt, calcium, potassium salts). If an accelerator such as cobalt drier has to be added, mix this accelerator with base material before adding catalyst.
Incompatible materials: Oxidizers, peroxides, strong acids
Hazardous decomposition products: Thermal decomposition or combustion can produce fumes containing carbon monoxide, carbon dioxide, organic acids

Section 11 Toxicological Information

Information on the likely routes of exposure

Can be absorbed through the respiratory, digestive, skin, and eyes.

Section 11 Toxicological Information

Acute Toxicity

Chemical Component	LD50	LC50
Styrene	Oral: 4.37 g/kg (rat) Dermal: 5 g/kg (rabbit)	5000 ppm, 8 hour (rat)
Methanol	Not established	Not established
Cobalt 2-Ethyl hexanoate 12%	3.1 g/kg (rat)	Not established

Information on toxicological effects

Acute Effects: May cause central nervous system depression causing headache, nausea, vomiting, drowsiness, dizziness and muscle weakness. Inhalation of high concentrations can lead to convulsions, coma, and death.
Chronic Effects: Can cause damage to the brain and nervous system such as dizziness, headache and nausea, if exposure continues, loss of consciousness occurs with possible damage to the liver and kidneys.
Skin Corrosion/Irritation: May cause lesions to skin.
Serious Eye Damage/Irritation: May cause redness and pain in eyes.
Skin Sensitization: May rarely cause skin sensitization.
Respiratory Sensitization: May rarely cause occupational asthma.
Germ Cell Mutagenicity: No data available
Carcinogenicity: Styrene, Group 2B – Possibly Carcinogenic to Humans
Reproductive Toxicity: No data available
Specific Target Organ Toxicity – Single Exposure: No data available
Specific Target Organ Toxicity – Repeated Exposure: No data available

Section 12 Ecological Information

Ecotoxicity: Fish (Pimephales promelas) : CL50 (96h) = 4.02 mg/L
Persistence and degradability: Readily biodegradable in soil under aerobic conditions.
Freshwaters half-life: 15 days. Groundwater half-life: 4 to 30 weeks. Marine waters half-life (estimate): 45 days. In the presence of sea water, styrene will be reduced by volatilization, photo-oxidation and biotransformation.
Bioaccumulative potential: Octanol-water partition coefficient: Log Kow = 3.02
Bio-concentration factor: Fish= 74, Crab= 12, Goldfish =13.5
Mobility in soil: Moderate
Results of PBT & vPvB assessment: No data available

Section 13 Disposal Considerations

Dispose of in accordance with local, provincial and federal regulations. Do not incinerate closed containers. Incinerate in approved facility. Liquid residue must be treated as hazardous waste and disposed in accordance with environmental regulations.

Section 14 Transport Information

DOT/IMDG/IATA/TDG

UN Number: UN1866
Shipping Name: Resin Solution
Hazard Class: 3
Packing Group: III
Placard: Flammable 3
Environmental hazards: Not considered a marine pollutant
Maximum quantity per limited quantity exemption: 5.0 Liters

Section 15 Regulatory Information

TSCA Inventory Status: All ingredients listed on the Toxic Substance Control Act Inventory
Canada Inventory (DSL): All components are listed or exempted
Canada Inventory (NDSL): Not listed
SARA 313: Styrene (CAS 100-42-5), Methanol (CAS 67-56-1)
California Proposition 65: ⚠ WARNING: This product can expose you to chemicals including styrene and methanol, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information, go to www.P65Warnings.ca.gov.

Section 16 Other Information

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Date of Previous Issue: March 12, 2021
Current Revision: April 28, 2023