



MATERIAL SAFETY DATA

Chemtrec 24-Hour Emergency Telephone

Domestic North America (800) 424-9300

International (800) 527-3887

This MSDS complies with 29 CFR 1910.1200 (Hazard Communications)

1. Product and Supplier Identification

Product Name: Orca Core Bonding Putty 4001

Product Number: 0614001F

Date of Prep: 08/18/2010

Product Type: Unsaturated Polyester Resin

Supplier: Fiberlay Inc.
24 S. Idaho S.
Seattle, Wa 98134
(206)782-0660

2. Composition/Information On Ingredients

CAS No.	Chemical Name	% WT	SARA 313	PEL	TWA	STEL
100-42-5	STYRENE	24-30	x	425mg/m ³ PPM 100	PPM 550 215mg/m ³ PPM 5000	PPM 100 425mg/m ³

3. Hazards Identification

Hazardous Identification Information: HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 2

Chronic exposure may cause damage to the central nervous system, respiratory system, lungs, eyes, skin, gastrointestinal tract, liver, spleen, and kidneys.

High temperature exposure for extended periods of time will result in spontaneous uncontrolled exothermic polymerization.

4. First Aid Measures

Route(s) of Entry: Inhalation, Ingestion, Skin and Eye contact.

Major Exposure Hazard:

Eye Contact: Severe irritation, redness, tearing, blurred vision

Skin Contact: Prolonged or repeated exposure can cause moderate irritation, de-fatting, dermatitis, and sensitization.

Inhalation: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. High concentrations may result in narcosis (central nervous system depression).

Ingestion: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into lungs can cause chemical pneumonitis, which can be fatal.

Chronic exposure may cause damage to the central nervous system, respiratory system, lungs, eyes, skin, gastrointestinal tract, liver, spleen, and kidneys.

Signs and Symptoms: Skin, eye and respiratory tract irritation.

Emergency and First Aid Procedures:

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. If irritation continues, seek medical attention.

Eye Contact: Flush eyes with water for at least 15 minutes and contact a physician.

Ingestion: Do not induce vomiting. Call a physician.

Inhalation: Remove person to fresh air. If person is not breathing give mouth-to-mouth resuscitation and contact a physician.

5. Fire Fighting Measures

Flash point: (Styrene) 90°F PENSKEY-MARTEN CLOSED CUP

Lower Explosive Limit: 1.10%

Upper Explosion Limit: 6.10%

Fire Extinguishing Media:

Foam, carbon dioxide or chemical fire fighting apparatus.

Special Fire Fighting Procedures:

Cool tanks and drums with water. Firefighters should wear self contained breathing apparatus and protective clothing.

Unusual Fire and Explosion:

High temperature exposure for extended periods of time will result in spontaneous uncontrolled exothermic polymerization

6. Handling and Storage

Precautions to be Taken:

Store in a cool, dry place away from oxidizers. Do not store in direct sunlight. Work with adequate general and local exhaust ventilation to minimize exposure to vapors.

Other Precautions:

Avoid skin and eye contact.

7. Exposure Controls, Personal Protection

Ventilation Requirements:

Local exhaust ventilation should be used to control the emission of air contaminants. General dilution may assist with the reduction of contaminate concentrations. ventilation

Personal Protective Equipment:

Protective Gloves: Polyvinyl alcohol gloves and polyethylene garments are recommended

Eye Protection: OSHA compliant goggles or face shields recommended.

Other Equipment: Emergency eye wash stations should be located in the work areas.

8. Physical and Chemical Properties

Boiling Point:	293°F	Melting Point:	NA
Vapor Pressure (mm Hg.):	3.56 MM Hg	Solubility In Water:	N/A
Vapor Density (AIR = 1):	2.98		

Other Information:

Percent Volatile by Volume (%): 21-27

Specific Gravity: 0.78

9. Stability and Reactivity

Stability: Stable under normal conditions. Avoid exposure to temperatures above 100°F or 38°C.

Incompatibility (Materials to Avoid): Avoid contact with strong mineral acids, peroxides, oxidizing agents, and polymerization catalysts.

Decomposition/By Products: Thermal decomposition may yield carbon monoxide / dioxide, low molecular weight hydrocarbons, and organic acids.

Hazardous Polymerization: Can occur

10. Toxicological Information

IARC (International Agency for Research on Cancer) has re-classified styrene from a Group 3 substance to a Group 2B substance. This is not based on any significant new evidence that styrene might be carcinogenic, but rather on a broadening of the definition for Group 2B classification.

11. Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental regulations.

12. Regulatory Information

TSCA Inventory Status: This substance or mixture appears on the Toxic Substance Control Act (TSCA) Inventory.
SARA Hazard categories (section 311 and section 312): Reactivity, Immediate Health, Delayed Health, Fire.

Hazardous Material Identification System:

Health: 2
Flammability: 3
Reactivity: 2

NFPA Rating (Nat'l Fire Protection Association)

Health: 2
Flammability: 3
Reactivity: 2

13. Other Information

Preparation Date: 8-18-10

Prepared by: Fiberlay Inc

Comments: This Material Safety Data Sheet was prepared using information provided by Sewon Chemical Co. Ltd., Fiberlay Inc. and CCINFO.

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Revisions: None