

Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Product Name: GSP EP200
 Product Use: One-Component Epoxy
 Effective Date: 6/17/05

Manufactured by:
 G.S. Polymers, Inc.
 195 Arovista Ave.
 Brea, CA 92821
 (714) 672-0567 Fax: (714) 672-0987

In an emergency call CHEMTREC @ 800-424-9300

Section 2 – Composition/Information on Ingredients

Hazardous Ingredients(s)	%(by wt.)	OSHA (ACGIH) TLV	CAS NO.
Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)	*	Not Available	25068-38-6
Amine adduct with epoxy resin	*	Not Available	134091-76-2
Silicon Dioxide**	*	.05mg/m3 (respirable)	14808-60-7
Titanium Dioxide**	*	10 mg/m3 (respirable)	13463-67-7

* Significant amounts of these hazardous ingredients are present in this material. The percentage of each component is proprietary information.

** Silicon Dioxide and Titanium Dioxide are only hazardous in a respirable (dust) form and do not present a health hazard in the wet or cured form. However, see special warning where grinding, sanding and cutting of cured product is performed.

Section 3 – Hazards Identification

Primary Route(s) of Entry: Skin Contact, Eye Contact, Ingestion

Skin Contact: May cause allergic skin reactions and skin sensitization.

Eye Contact: May cause eye irritation.

Ingestion: Oral Toxicity is low. Not expected to cause severe health hazards.

Additional Hazards:

Cutting or grinding of cured material may release microcrystalline silica (Quartz) and may present a chronic respiratory hazard. See special warning on supplemental addendum, avoid breathing dust -- lung damage (silicosis) may occur.

Read the entire MSDS for a more thorough evaluation of the hazards.

Section 4 – First Aid Measures

Eyes: For eye contact, immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water.

Skin: For skin contact, wash with large amounts of running water, and soap, if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical

attention. Discard or decontaminate clothing before re-use and destroy contaminated shoes.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion: If swallowed, give at least 3-4 glasses of water but do not induce vomiting. If vomiting occurs, give water again. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention. Have physician determine whether vomiting or stomach evacuation is necessary.

Overexposure Effects: Irritation, sensitization and dermatitis.

Medical Conditions

Aggravated by Exposure: Allergy, eczema or skin conditions.

Additional Information: Promptly remove wet contaminated non-impervious clothing. Wash before reuse.

Section 5 – Fire Fighting Measures

Flash Point: 490 F (254 C) Epoxy Resin; Closed Cup

Extinguishing Media: Carbon Dioxide, foam, dry chemical, water spray.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: At elevated temperatures, above 212 F (100 C) containers of this product may initiate an exothermic reaction and explode. Keep containers cool with water spray. Decomposition and combustion products may be toxic.

Section 6 – Accidental Release Measures

For major spills call Chemtrec (800) 424-9300.

Spill or Leak Procedures: Avoid all personal contact. Take up with absorbent material. Shovel into closable containers. Flush contaminated area with water.

Section 7 – Handling and Storage

Storage:

Maintain storage temperature at 77 F (25 C). Do not exposure containers of this product to elevated temperature. At elevated temperatures, above 212 F (100 C) containers of this product may initiate an exothermic reaction and explode. Store product in cool, dry area in sealed containers. Keep containers closed to prevent contamination.

Handling Precautions:

Avoid contact with eyes, skin and clothing. Avoid breathing vapor, mist or spray. Use only with good ventilation. Promptly remove wet contaminated non-impervious clothing and wash before reuse. Destroy contaminated leather and absorbent shoes. Individuals should wash thoroughly after handling. For industrial use only.

Section 8 – Exposure Controls/Personal Protection

Personal Protective Equipment:

Wear appropriate equipment to prevent eye or skin contact. Use of barrier cream recommended.

Eye Protection: Wear splash resistant safety goggles.

Skin Protection: Wear impervious gloves.

Ventilation: Good general mechanical ventilation and local exhaust.

Respirators: Organic chemical cartridge respirator, if needed.

Special Precaution: Cutting or grinding of cured material may release microcrystalline silica (Quartz). See special warning on supplemental addendum, avoid breathing dust -- lung damage (silicosis) may occur.

Section 9 – Chemical and Physical Properties

Physical Form Viscous Liquid
Color Black
Odor Slight
Boiling Point Themally Degrades
Viscosity Thick Paste
Solubility in Water Slightly Soluable
Specific Gravity 1.56
Bulk Density 13.00 lbs/gal
Vapor Pressure Not Established

Section 10 – Stability and Reactivity

Stability: This material undergoes an exothermic reaction at temperatures around 100 C
Hazardous Polymerization: Occurs at elevated temperatures
Incompatibilities: High temperature; Strong oxidizing agents.
Instability Conditions: Avoid strong acids or bases in bulk and elevated temperatures
Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes.

Section 11 – Toxicology Information

TOXICITY DATA FOR: Epoxy Resin

Acute Toxicity:

Oral LD50: > 5000 mg/kg (Rat)
 Dermal LD50: > 6000 mg/kg (Rabbit)
 Eye Effects: Slight irritation (Rabbit)
 Skin Effects: Moderate irritation (Rabbit)
 Teratogenicity: No adverse effects on embryonic or fetal development were observed.

Mutagenicity:

Ames Test: both positive and negative results
 Hamster Bone Marrow Cytogenetics (in vivo): negative
 Mouse Spermatocytes Cytogenetics (in vivo): negative
 Micronucleus Test (in vivo): negative
 Mouse Dominant Lethal Test: negative
 Alkylation of DNA: positive
 Human Mononucleated WBC (in vitro): negative
 Host Mediated Assay: negative

Sub-Chronic:

(Rat) No observable effect at highest level studied (1000 mg/kg/day for 28 days) in oral feeding study.

Chronic Toxicity:

2-Year Dermal Study in Mice: no treatment related effects.

2-Year Skin Painting Studies:

A C3HF/BD Mice: no increased tumor incidence.
 B C57BL/6BD Mice: slight increase in epidermal localized carcinomas at high dose.
 C C3H Mice: no tumors.

Mice receiving skin applications of the Diglycidyl Ether of Bisphenol A or essentially identical resins for two years have yielded very limited evidence of weak carcinogenicity. The published report on this study concludes that this resin product “is not a systemic carcinogen when applied to the skin of CF-1 mice” and the tumor data “was of no biological importance”. Based on all available data, IARC (International Agency for Research on Cancer) has concluded in 1988 that DGEBA is not classified as a carcinogen.

Section 12 – Ecological Information

ECOLOGICAL DATA FOR: Epoxy Resin

Biodegradability: (Modified Sturm method): ~12%

Fish Toxicity:

Rainbow Trout 96 hr): LC50 1.5 mg/l

Zebra Fish (96 hr): LC50 2.4 mg/l

Invertebrate Toxicity: Daphnia Toxicity (24 hr): EC50 3.6 mg/l.

Section 13 – Disposal Considerations

Waste Disposal Method: Dispose in accordance with federal, state and local regulations.

Section 14 – Transportation Information

Department of Transportation: Not Regulated in Non-Bulk Packaging

Section 15 – Regulatory Information

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This product is considered to be a hazardous chemical under the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

SARA Title III: Section 313: None

TSCA Section 8(b) – Inventory Status: Chemical component listed on TSCA Inventory

TSCA Section 12(b) – Export Notification: This product contains chemicals which are regulated by TSCA 12(b) Regulation and it is required that proper export notification shall be sent to EPA prior to shipping out of the United States America.

CAS Number: 1675-54-3

Chemical Name: Bisphenol A Diglycidyl Ether

State Regulations:

California Proposition 65: This product contains crystalline silica (respirable) which is known to the State of California to cause cancer.

New Jersey Right-to-Know: The following is required composition information:

CAS Number: 25068-38-6

Chemical Name: Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl)oxirane

Pennsylvania Right-to-Know: The following is required composition information:

CAS Number: 25068-38-6

Chemical Name: Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenol A Epoxy Resin

