MATERIAL SAFETY DATA SHEET Gougeon Brothers, Inc.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

 PRODUCT NAME:
 WEST SYSTEM[®] 501 White Pigment.

 PRODUCT CODE:
 501

 CHEMICAL FAMILY:
 Epoxy resin.

 CHEMICAL NAME:
 Epoxy resin with titanium dioxide pigment.

 FORMULA:
 No information.

MANUFACTURER:

Gougeon Brothers, Inc. 100 Patterson Avenue Bay City, MI 48706, U.S.A. Phone: 989-684-7286 **EMERGENCY TELEPHONE NUMBERS:**

Transportation CHEMTREC:800-424-9300 Non-transportation Poison Hotline:313-745-5711

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS#	CONCENTRATION
Pigment	13463-67-7	55%
Epoxy Resin	25085-99-8	40%
Polypropylene Glycol Glycidyl Ether	9072-62-2	5%

3. HAZARDS IDENTIFICATION

EMERGENCY	OVERVIEW
EMERUEIUCI	

HMIS Hazard Rating: Health - 2 Flammability - 1

Reactivity - 1

CAUTION! May cause allergic skin response in certain individuals. May cause moderate skin irritation. White paste with mild resin odor.

PRIMARY ROUTE(S) OF ENTRY: Skin contact.

POTENTIAL HEALTH EFFECTS:

ACUTE INHALATION: Not likely to cause acute effects unless heated to high temperatures. If product is heated, vapors generated can cause headache, nausea, dizziness and possible respiratory irritation if inhaled in high concentrations.

CHRONIC INHALATION:...... Not likely to cause chronic effects. Repeated exposure to high vapor concentrations may cause irritation of pre-existing lung allergies and increase the chance of developing allergy symptoms to this product.

CHRONIC SKIN CONTACT: May cause sensitization in susceptible individuals. May cause moderate irritation to the skin.

EYE CONTACT: May cause irritation.

INGESTION: Low acute oral toxicity.

SYMPTOMS OF OVEREXPOSURE: Possible sensitization and subsequent allergic reactions usually seen as redness and rashes. Repeated exposure is not likely to cause other adverse health effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing skin and respiratory disorders may be aggravated by exposure to this product. Pre-existing lung and skin allergies may increase the chance of developing allergic symptoms to this product.

4. FIRST AID MEASURES:

FIRST AID FOR INHALATION: Remove to fresh air if effects occur. Consult a physician.

FIRST AID FOR INGESTION:...... If victim is conscious, give large quantities of water. Induce vomiting only at the instructions of a physician.

5. FIRE FIGHTING MEASURES:

SPECIAL FIRE FIGHTING PROCEDURES:

Use a self-contained breathing apparatus and appropriate protective clothing.

6. ACCIDENTAL RELEASE MEASURES:

7. HANDLING AND STORAGE:

MSDS# 501-01a

HANDLING PRECAUTIONS: Avoid prolonged or repeated skin contact. Wash thoroughly after handling. Launder contaminated clothing before reuse. Avoid inhalation of vapors from heated product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

SKIN PROTECTION GUIDELINES: Wear liquid-proof, chemical resistant gloves (nitrilebutyl rubber, neoprene, butyl rubber or natural rubber) and full body-covering clothing.

RESPIRATORY/VENTILATION GUIDELINES:

Good room ventilation is usually adequate for most operations. Wear a NIOSH approved respirator with an organic vapor cartridge whenever exposure to vapor in concentrations above applicable limits is likely.

ADDITIONAL PROTECTIVE MEASURES:

Practice good caution and personal cleanliness to avoid skin and eye contact. Avoid skin contact when removing gloves and other protective equipment. Wash thoroughly after handling.

OCCUPATIONAL EXPOSURE LIMITS: Not established for product as whole. Refer to OSHA's Permissible Exposure Level (PEL) or the ACGIH Guidelines for information on specific ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM	Paste.
COLOR	White.
ODOR	Mild resin odor.
BOILING POINT	No data.
MELTING POINT/FREEZE POINT	No data.
pH	No data.
SOLUBILITY IN WATER	Insoluble.
SPECIFIC GRAVITY	1.9
BULK DENSITY	No data.
VAPOR PRESSURE	No data.
VAPOR DENSITY	No data.
% VOLATILE BY WEIGHT	No data.

10. <u>REACTIVITY:</u>

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: Oxides of aluminum, carbon, and titanium; aldehydes.

11. TOXICOLOGICAL INFORMATION:

No specific oral, inhalation or dermal toxicology data is known for this product. Specific toxicology information for a bisphenol-A based epoxy resin present in this product is indicated below:

Oral:	$LD_{50} > 5000 \text{ mg/kg} \text{ (rats)}$
Inhalation:	. No Data.
Dermal:	. $LD_{50} = 20,000 \text{ mg/kg}$ (skin absorption in rabbits)

TERATOLOGY: Diglycidyl ether bisphenol-A (DGEBPA) did not cause birth defects or other adverse effects on the fetus when pregnant rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally.

CARCINOGENICITY:

NTP	Product not listed.
IARC	Product not listed.
OSHA	Product not listed.

Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol-A. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBPA is carcinogenic. Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBPA is not classified as a carcinogen.

Epichlorohydrin, an impurity in this product (<5 ppm) has been reported to produce cancer in laboratory animals and to produce mutagenic changes in bacteria and cultured human cells. It has been established by the International Agency for Research on Cancer (IARC) as a probable human carcinogen (Group 2A) based on the following conclusions: human evidence – inadequate; animal evidence – sufficient. It has been classified as an anticipated human carcinogen by the National Toxicology Program (NTP).

12. ECOLOGICAL INFORMATION:

No information.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: Follow all applicable federal, state and local disposal regulations.

14. TRANSPORTATION INFORMATION:

D.O.T. SHIPPING NAME:	Not regulated by D.O.T.
TECHNICAL SHIPPING NAME:	
D.O.T. HAZARD CLASS:	Not applicable.
U.N./N.A. NUMBER:	
PACKING GROUP:	

15. <u>REGULATORY INFORMATION:</u>

OSHA STATUS:	Hazardous. Irritant. Possible sensitizer.
TSCA STATUS:	All components are listed on the TSCA Inventory.
SARA TITLE III:	i j
SECTION 313 TOXIC CHEMICALS	None.

STATE REGULATORY INFORMATION:

The following chemicals are specifically listed or otherwise regulated by individual states. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME /CAS NUMBER	CONCENTRATION	STATE CODE
Epichlorohydrin 106-89-8 Phenyl glycidyl ether	< 5 ppm	¹ CA
122-60-1	< 5 ppm	¹ CA

^{1.} These substances are known to the state of California to cause cancer or reproductive harm, or both.

16. OTHER INFORMATION:

REASON FOR ISSUE:	Information update in Section 2, 3, 11, 15 and 16.
PREPARED BY:	-
APPROVED BY:	G. M. House
TITLE:	Health, Safety & Environmental Manager
APPROVAL DATE:	January 5, 2001
SUPERSEDES DATE:	January 3, 1998
MSDS NUMBER:	501-01a

Note: The Hazardous Material Indexing System (HMIS), cited in the Emergency Overview of Section 3, uses the following index to assess hazard rating: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; and 4 = Severe.

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