# MATERIAL SAFETY DATA SHEET
# Gougeon Brothers, Inc.

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** ..... WEST SYSTEM® 207™ Special Coating Hardener
**PRODUCT CODE:**..... 207
**CHEMICAL FAMILY:** ..... Amine.
**CHEMICAL NAME:**..... Modified polyamine.
**FORMULA:** ..... Not applicable.

**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 |
|---|---|---|
| Polyoxypropylenediamine | 9046-10-0 | 25-50% |
| Reaction products of isophorone diamine with phenol/formaldehyde | 25265-17-2 | < 25% |
| Isophoronediamine | 2855-13-2 | < 25% |
| Reaction products of benzene-1,3-dimethaneamine with hydroxybenzene and formaldehyde | 57214-10-5 | <25% |
| Hydroxybenzene | 108-95-2 | < 12% |
| m-Xylene diamine | 1477-55-0 | < 12% |

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**HMIS Hazard Rating: Health - 3 Flammability - 1 Reactivity - 0**

DANGER! Corrosive. Severe eye irritant. Severe skin irritant. Severe respiratory irritant. May cause skin sensitization. Harmful if swallowed. Harmful if absorbed through the skin. Straw-yellow colored liquid, ammonia odor.

**PRIMARY ROUTE(S) OF ENTRY:** ..... Skin contact, eye contact, inhalation.

**POTENTIAL HEALTH EFFECTS:**

**ACUTE INHALATION:**..... Exposure to high concentrations of vapor causes irritation to the respiratory tract. Coughing and chest pain may result.

**CHRONIC INHALATION:**..... Prolonged or repeated exposure to high concentrations of vapors may cause lung tissue damage. Exposure to low vapor concentrations may cause a sore throat.

**ACUTE SKIN CONTACT:** ..... Moderately corrosive. Prolonged contact may cause skin damage with burns and blistering. Wide spread contact may result in material being absorbed in harmful amounts.

**CHRONIC SKIN CONTACT:** ..... May cause persistent irritation or dermatitis. Repeated contact may cause allergic reaction/sensitization and possible skin tissue destruction. Repeated absorption may cause internal organ damage.

**EYE CONTACT:** ..... Causes severe irritation, pain and possible permanent injury. Vapor absorption into the eye can cause blurred vision and injury.

**INGESTION:** ..... Moderately toxic. May cause bleeding of the gastrointestinal tract. May cause burning of the mouth and throat. Aspiration hazard.

**SYMPTOMS OF OVEREXPOSURE:** ..... Development of allergic reaction or sensitization. Skin irritation and redness. Respiratory irritation or tightness of chest. Conjunctivitis or corneal damage. Internal organ compalications.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**
Chronic respiratory disease (*e.g.*, bronchitis, asthma). Skin conditions and allergies. Eye disorders.

## 4. FIRST AID MEASURES:

**FIRST AID FOR EYES:** ..... Immediately flush with water for at least 15 minutes. Get prompt medical attention.

**FIRST AID FOR SKIN:** ..... Remove contaminated clothing. Immediately wash skin with soap and water. Do not apply greases or ointments. Get medical attention if severe exposure.

**FIRST AID FOR INHALATION:** ..... If symptoms occur as noted in Section 3, remove to fresh air. Get medical attention if symptoms persist or worsen.

**FIRST AID FOR INGESTION:** ..... Give conscious person at least 2 glasses of water. Do not induce vomiting. If vomiting should occur spontaneously, keep airway clear. Get medical attention.

## 5. FIRE FIGHTING MEASURES:

**FLASH POINT:** ..... > 200°F (PMCC)

**EXTINGUISHING MEDIA:** ..... Water spray, dry chemical, alcohol foam and carbon dioxide ($CO_2$).

**FIRE AND EXPLOSION HAZARDS:** ..... Burning can generate toxic fumes. When mixed with sawdust, wood chips, or other cellulosic material, spontaneous combustion can occur under certain conditions. If hardener is spilled into or mixed with sawdust, heat is generated as the air oxidizes the amine. If the heat is not dissipated quickly enough, it can ignite the sawdust.

**SPECIAL FIRE FIGHTING PROCEDURES:** .... Use full-body protective gear and a self-contained breathing apparatus. If spill has ignited, use water spray to disperse vapors and protect personnel attempting to stop leak. Use water to cool fire-exposed containers.

## 6. ACCIDENTAL RELEASE MEASURES:

**SPILL OR LEAK PROCEDURES:**..... Stop leak without additional risk. Wear proper personal protective equipment. Dike and contain spill. Ventilate area. Large spill - dike and pump into appropriate container for recovery. Small spill - dilute with water and recover or use inert, non-combustible absorbent material (*e.g.*, sand) and shovel into suitable container. Do not use sawdust, wood chips or other cellulosic materials to absorb the spill, as the possibility for spontaneous combustion exists. Wash spill residue with warm, soapy water if necessary.

## 7. HANDLING AND STORAGE:

**STORAGE TEMPERATURE (min./max.):**..... 40°F (4°C) / 90°F (32°C)

**SHELF LIFE:**..... Two years or more in the original sealed container.

**STORAGE:**..... Minimum feasible handling temperatures should be maintained. If stored above 100°F, nitrogen atmosphere is recommended. Keep containers tightly closed.

**HANDLING PRECAUTIONS:** ..... Use only with adequate ventilation. Do not breath vapors or mists from heated material. Avoid contact with skin and eyes. Wash thoroughly after handling. When mixed with epoxy resin this product causes an exothermic reaction, which in large masses, can produce enough heat to damage or ignite surrounding materials and emit fumes and vapors that vary widely in composition and toxicity.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

**EYE PROTECTION GUIDELINES:**..... Chemical splash goggles or full-face shield.

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

**RESPIRATORY/VENTILATION GUIDELINES:**
General mechanical or local exhaust ventilation. In the absence of adequate ventilation, use a NIOSH approved air purifying respirator with an organic vapor cartridge.

**ADDITIONAL PROTECTIVE MEASURES:**..... Use where there is immediate access to safety shower and emergency eye wash. Provide proper wash/cleanup facilities for proper hygiene. Contact lens should not be worn when working with this material.

**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** ..... Liquid.
**COLOR**..... Yellow.
**ODOR** ..... Ammonia-like.
**BOILING POINT** ..... > 480°F.
**MELTING POINT/FREEZE POINT**..... No data.
**pH** ..... 11.2
**SOLUBILITY IN WATER**..... Appreciable.
**SPECIFIC GRAVITY**..... 1.01
**BULK DENSITY** ..... 8.51 pounds/gallon.
**VAPOR PRESSURE** ..... < 1 mmHg @ 20°C.
**VAPOR DENSITY** ..... Heavier than air.
**VISCOSITY** ..... 275 cPs.
**% VOLATILE BY WEIGHT**..... EPA Method 24, as described in 40 CFR Part 60, was used to determine the Volatile Matter Content of mixed epoxy resin and hardener. This method states that two-component coating systems should be tested by determining weight loss after mixing the individual components together at the proper ratio, dissolving them in an appropriate solvent, and subjecting them to a temperature of 230°F. 105 Resin and 207 Hardener, mixed together at 3:1 by weight, has a density of 1154 g/L (9.63 lbs/gal). The combined VOC content for 105/207 is 100.6 g/L (0.84 lbs/gal).

## 10. REACTIVITY:

**STABILITY:** ..... Stable.

**HAZARDOUS POLYMERIZATION:**..... Will not occur.

**INCOMPATIBILITIES:**..... Strong oxidizers, acids.

**DECOMPOSITION PRODUCTS:** ..... Ammonia, oxides of nitrogen, carbon monoxide, carbon dioxide, and possibly aldehydes and ketones.

## 11. TOXICOLOGICAL INFORMATION:

No specific oral, inhalation or dermal toxicology data is known for this product.

Oral: ..... Expected to be moderately toxic.
Inhalation: ..... Expected to be moderately toxic.
Dermal: ..... Expected to be moderately toxic.

Adsorption of phenolic solutions through the skin may be very rapid and can cause death. Lesser exposures can cause damage to the kidney, liver, pancreas and spleen; and cause edema of the lungs. Chronic exposures can cause death from liver and kidney damage.

**CARCINOGENICITY:**
NTP ..... No.
IARC ..... No.
OSHA ..... No.

This product contains no known carcinogens in concentrations greater than 0.1%.

## 12. ECOLOGICAL INFORMATION:

Environmental Fate 108-95-2 Phenol: Biodegradeability = 99.5% at 7 days.

Wastes from this product may present long term environmental hazards. Do not allow into sewers, on the ground or in any body of water.

## 13. DISPOSAL CONSIDERATIONS:

**WASTE DISPOSAL METHOD:** ..... Evaluation of this product using RCRA criteria shows that it is not a hazardous waste, either by listing or characteristics, in its purchased form. It is the responsibility of the user to determine proper disposal methods.

Incineration or landfill may be preferred methods when conducted in accordance with federal, state and local regulations.

## 14. TRANSPORTATION INFORMATION:

**D.O.T. SHIPPING NAME:**..... Polyamines, liquid, corrosive, n.o.s.
**TECHNICAL SHIPPING NAME**:..... Polyoxypropylenediamine
**D.O.T. HAZARD CLASS:** ..... Class 8
**U.N./N.A. NUMBER:**..... UN 2735
**PACKING GROUP:**..... PG II

## 15. REGULATORY INFORMATION:

**OSHA STATUS:** ..... Corrosive; irritant; possible sensitizer; liver or kidney toxin.
**TSCA STATUS:**..... All components are listed on TSCA inventory.
**SARA TITLE III:**
**SECTION 313 TOXIC CHEMICALS:**..... This product contains hydroxybenzene (phenol) and is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

## 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 |
|---|---|---|

None.

## 16. OTHER INFORMATION:

**REASON FOR ISSUE:** ..... Information update in Section 14.
**PREPARED BY:**..... T. J. Atkinson
**APPROVED BY:** ..... G. M. House
**TITLE:**..... Health, Safety & Environmental Manager
**APPROVAL DATE:**..... April 11, 2002
**SUPERSEDES DATE:** ..... January 5, 2001
**MSDS NUMBER:** ..... 207-02a

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.