SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: WEST SYSTEM[®] 206 Slow Hardener

APPLICABLE PRODUCT CODES:206, 206-A, 206-B, 206-C, 206-E, C 206-A, C 206-B, C 206-C, C 206-E

CHEMICAL FAMILY: Polyamine mixture.

INTENDED PRODUCT USES:.....Curing agent for epoxy resins.

PRODUCT USE RESTRICTIONS: None identified. SDS VERSION: 206-2019a

MANUFACTURER:

Gougeon Brothers, Inc. 100 Patterson Ave. Bay City, MI 48706, U.S.A.

Phone: 866-937-8797 or 989-684-7286

www.westsystem.com

EMERGENCY TELEPHONE NUMBERS (24 HRS):

Transportation

Non-transportation

Poison Hotline: 800-222-1222

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Acute toxicity, Oral, Category 4
Acute toxicity, Inhalation, Category 5
Skin corrosion/irritation, Category 1B
Skin sensitizer, Category 1
Eye damage/irritation, Category 1
Specific target organ toxicity (single exposure - inhalation), Category 3
Acute aquatic toxicity, Category 3
Chronic aquatic toxicity, Category 2

Label Elements

Hazard Pictogram(s):



Signal Word:

DANGER

Hazard Statements:

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H333 May be harmful if inhaled

H335 May cause respiratory irritation

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well ventilated area

P272 Contaminated work clothing should not be allowed out of the workplace

P273 Avoid release to the environment

P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P301 + P330 + 331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse or wash skin with soap and water (or shower).

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.

P310 Immediately call POISON CONTROL CENTER or doctor.

P333 + P313 If skin irritation or rash occurs: Get medical attention

P362 + P364 Take off contaminated clothing and wash it before reuse or discard

P391 Collect spillage

<u>Storage</u>

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WEST SYSTEM® 206 Slow Hardener

P403 + P233 Store in a well-ventilated area. Keep container tightly closed.

P405 Store locked up.

Disposal

P501 Dispose of contents and container according to local, state, national and International regulations

Other Hazards

None known.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

CAS#	CONCENTRATION (%)
9046-10-0	30-60
31326-29-1	10-30
112-57-2	10-30
111-40-0	7-13
26950-63-0	5-10
112-24-3	1-5
	9046-10-0 31326-29-1 112-57-2 111-40-0 26950-63-0

The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold.

	be present at a level below its disclosure threshold.
l.	FIRST AID MEASURES
	FIRST AID FOR EYES
	FIRST AID FOR SKIN
	FIRST AID FOR INHALATION
	FIRST AID FOR INGESTION
5.	FIRE FIGHTING MEASURES
	EXTINGUISHING MEDIA:
	FIRE AND EXPLOSION HAZARDS:
	SPECIAL FIRE FIGHTING PROCEDURES:
_	ACCIDENTAL DELEACE MEACURES

material (e.g., sand) and collect in a suitable, closed container. Do not use sawdust, wood chips or other cellulosic materials to absorb the spill, as the possibility for spontaneous combustion exists. Warm, soapy water may be used to clean residual.

MITIGATION AND CLEAN UP PROCEDURES: Stop leak without additional risk. Isolate area. Dike and absorb with inert

appropriate safety and personal protective equipment as indicated in Section 8.

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7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:Use with adequate general ventilation and/or local ventilation to keep exposures below established limits.

OCCUPATIONAL EXPOSURE LIMITS: Exposure limits may not be established for this product as a whole. For established exposure limits of specific ingredients in this product, or other available exposure limit information, refer to the table below.

Ingredient Name	CAS#	Exposure Limit Information	
Polyoxypropylenediamine	9046-10-0	No data available	
Polymer of epichlorohydrin / bisphenol A and diethylenetriamine	31326-29-1	No data available	
Tetraethylenepentamine	112-57-2	AIHA WEEL: 1 ppm; 5 mg/kg; SKIN	
Diethylenetriamine	111-40-0	1 ppm TWA ACHIH, (SKIN)	
Triethylenetetramine, reaction products with propylene oxide	26950-63-0	No data available	
Triethylenetetramine	112-24-3	AIHA WEEL: 1 ppm; 6 mg/m3; SKIN	

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	. Liquid.
COLOR:	. Colorless
ODOR:	. Ammonia-like
ODOR THRESHOLD:	. No data available
pH	. 11.0
MELTING POINT / FREEZING POINT	. No data.
BOILING POINT (760mm/Hg):	. > 400°F (204°C) estimated based on similar product.
FLASH POINT:	. > 200°F (93°C) estimated based on similar product.
AUTO IGNITION TEMPERATURE	. No data.
LOWER EXPLOSIVE LIMIT (LEL)	. No data.
UPPER EXPLOSIVE LIMIT (UEL)	. No data.
VAPOR PRESSURE	. < 1 mmHg @ 20°C (estimated based on ingredient data).
SPECIFIC GRAVITY/DENSITY (water = 1)	. 1.01
BULK DENSITY	. 8.45 lbs./gal. (1.01 kg/L)
VAPOR DENSITY (air = 1)	. No data.
EVAPORATIOIN RATE (Butyl Acetate = 1)	. No data.
WATER SOLUBILITY (% BY WT.)	
PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow)	
KINEMATIC VISCOSITY:	. 65.6 (mm²/s @ 40°C)
DECOMPOSITION TEMPERATURE:	. No data available.

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VOC Content

 Resin/Hardener
 (g/L)
 (lb/gal)

 105 / 206
 9.59
 0.08

10. STABILITY AND REACTIVITY

STABILITY: Product is stable at normal temperatures and pressures.

REACTIVITY/HAZARDOUS REACTIONS: Product will not react by itself. A mass of more than one pound of product plus an epoxy resin will cause irreversible polymerization with significant heat buildup and pressure.

INCOMPATIBILITIES: Avoid acids, oxidizing materials, halogenated organic compounds (e.g., methylene chloride). External heating or self-heating could result in rapid temperature increase and pressure build up. If such a condition were to occur in a drum, the drum could expand and rupture violently.

CONDITIONS TO AVOID: Avoid excessive heat.

DECOMPOSITION PRODUCTS: Very toxic fumes and gases when burned or otherwise heated to decomposition. Decomposition products may include, but not limited to: oxides of nitrogen, volatile amines, ethylenediamine, ammonia, nitric acid,

11. TOXICOLOGICAL INFORMATION

nitrosamines.

Ingredient Name	CAS#	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
Polyoxypropylenediamine	9046-10-0	2855 mg/kg	2980 mg/kg	>0.74 mg/L 8h mist
Polymer of epichlorohydrin / bisphenol A and	31326-29-1	ATPE (500 mg/kg)	ATPE (1100	No data available
diethylenetriamine			mg/kg)	
Tetraethylenepentamine	112-57-2	1600 mg/kg	1260 mg/kg	No data available
Diethylenetriamine	111-40-0	1620 mg/kg	1090 mg/kg	10.07 – 0.3 mg/L 4hr aerosol/mist
Triethylenetetramine, reaction products with propylene oxide	26950-63-0	No data available	No data available	No data available
Triethylenetetramine	112-24-3	1716.2 mg/kg	805 mg/kg	No data available

^{1.} LC₅₀ data has been generated for this substance by subjecting rats to an airborne aerosol/mist atmosphere in a test chamber. It has not been determined that this data directly correlates to an inherent hazard of this product as would be expected under normal, foreseeable or anticipated conditions of use.

ACUTE TOXICITY:	. No specific toxicity data exists for this mixture. Classification is
based on acute toxicity estimation methods using ingredient data. Oral:	. Category 4. Harmful if swallowed. May cause gastrointestinal
irritation or ulceration. May cause burns of the mouth and throat.	, ,
Dermal:	. Not classified. Based on available data does not meet
Inhalation:	. Category 5. May be harmful if inhaled.
SKIN CORROSION / IRRITATION: immediate. May cause persistent irritation or dermatitis.	. Category 1B. Causes severe skin burns. Effects may be
SERIOUS EYE DAMAGE / IRRITATION:vision. May cause corneal damage resulting in vision impairment or ex	
RESPIRATORY SENSITIZATION:	. Not classified. Based on available data does not meet
SKIN SENSITZATION:	. Category 1. May cause allergic skin reaction.
REPRODUCTIVE TOXICITY:	. Not classified. Based on available data does not meet classification criteria.
MUTAGENICITY:	. Not classified. Based on available data does not meet classification criteria.
CARCINOGENICITY:	. Not classified. Based on available data does not meet classification criteria.
SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):	STOT SE Category 3. May cause irritation to the upper respiratory tract.
SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure):	. Not classified. Based on available data does not meet classification criteria.
ASPIRATION HAZARD:	. Not classified. Based on available data does not meet classification criteria.

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12. ECOLOGICAL INFORMATION

ACUTE AQUATIC TOXICITY:Calculated Estimate. Harmful to aquatic life.	Category 3. No specific test data available for the mixture.
CHRONIC AQUATIC TOXICITY:	Category 2. No specific test data available for the mixture.
PERSISTANCE AND BIODEGRADABILITY:	No specific test data available for the mixture.
MOBILITY IN SOIL:	No specific test data available for the mixture.
ADDITIONAL ECOTOXICITY INFORMATION: aquatic life with long lasting effects. Prevent release to the environment	

Ingredient	CAS#	Ecotoxicity Classification Information
Polyoxypropylenediamine	9046-10-0	
		Acute Aquatic Cat. 3; Chronic Aquatic Cat. 2
Polymer of epichlorohydrin / bisphenol A and	31326-29-1	Not classified
diethylenetriamine		
Tetraethylenepentamine	112-57-2	
		Acute Aquatic Cat. 2; Chronic Aquatic Cat. 2
Diethylenetriamine	111-40-0	Not classified
Tryiethylenetetramine, reaction products with propylene	26950-63-0	
oxide		Not classified
Tryiethylenetetramine	112-24-3	Chronic Aquatic Cat. 3

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.

Incinerate, recycle (fuel blending) or reclaim may be preferred methods when conducted in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

US DOT UN NUMBER: SHIPPING NAME: TECHNICAL SHIPPING NAME: HAZARD CLASS: PACKING GROUP: MARINE POLLUTANT:	Polyamines, liquid, corrosive, n.o.s. Polyoxypropylenediamine Class 8 PG II
CANADA TDG UN NUMBER: SHIPPING NAME: TECHNICAL SHIPPING NAME: HAZARD CLASS: PACKING GROUP: MARINE POLLUTANT:	Polyamines, liquid, corrosive, n.o.s. Polyoxypropylenediamine Class 8 PG II
IMDG UN NUMBER: SHIPPING NAME: TECHNICAL SHIPPING NAME: HAZARD CLASS: PACKING GROUP: EmS Number: MARINE POLLUTANT	Polyamines, liquid, corrosive, n.o.s. Polyoxypropylenediamine Class 8 PG II F-A, S-B
ICAO/IATA UN NUMBER:	Polyamines, liquid, corrosive, n.o.s. Polyoxypropylenediamine Class 8

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15. REGULATORY INFORMATION

COUNTRY	INVENTORY LIST	STATUS	
United States	TSCA	All ingredients are listed or otherwise compliant.	
Europe	EINECS or ELINCS	All ingredients are listed or otherwise compliant.	
Canada	CEPA (DSL/NDSL)	All ingredients are listed or otherwise compliant.	
Australia	AICS	All ingredients are listed or otherwise compliant.	
Japan	ENCS	All ingredients are listed or otherwise compliant.	
South Korea	KECI	All ingredients are listed or otherwise compliant.	
China	IECSC	All ingredients are listed or otherwise compliant.	
Philippines	PICCS	CAS# 26950-63-0 not on this inventory list.	

Canada WHMIS Confidential Business Information (CBI):................ No data available.

US EPA SARA TITLE III Reporting and Notification Requirements:

Subject to Section 302 (TPQ)	No data available.
Subject to Section 304 (RQ)	No data available.
Subject to Section 311 or 312	Immediate, Delayed.
Subject to Section 313	No data available.

US STATE REGULATORY INFORMATION:

The following chemicals may be specifically regulated by individual states. For details on state regulatory requirements you should contact the appropriate state agency.

COMPONENT NAME

/CAS NUMBER		STATE CODE
Propylene oxide 75-56-9	< 0.0035%	¹CA
Diethylenetriamine 111-40-0		PA
Triethylenetetramine 112-14-3		PA
Tetraethylenepentamine 112-57-2		PA
112-31-2		FA

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

16. OTHER INFORMATION

REASON FOR ISSUE: Updates to sections 3, 8, 11 & 15.
PREPARED BY: Gougeon Brothers, Inc.

SDS CONTACT: Safety@gougeon.com

TITLE: Health, Safety & Environmental Manager

 APPROVAL DATE:
 January 15, 2019

 SUPERSEDES DATE:
 September 7, 2016

 SDS VERSION:
 206-2019a

OTHER HAZARD INFORMATION AND RATING SYSTEMS:

HMIS® RATING

HEALTH:	3
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend: 0 = Low or None; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe

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WEST SYSTEM® 206 Slow Hardener

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