SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	WEST SYSTEM [®] SIX10 [®] Part B Hardener
APPLICABLE PRODUCT CODES:	610B
CHEMICAL FAMILY:	Rubber modified-polyamine mixture.
	Curing agent for epoxy resins.
PRODUCT RESTRICTIONS:	None identified.
SDS VERSION:	610B-2022a
MANUFACTURER:	EMERGENCY TELEPHO

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

2. HAZARDS IDENTIFICATION

Classification of Substance or Mixture

Skin corrosion/irritation, Category 1B Skin sensitizer, Category 1 Eye damage/irritation, Category 1 Germ cell mutagenicity, Category 2 Specific target organ toxicity – repeated exposure, Category 2 Acute aquatic toxicity, Category 3 Chronic aquatic toxicity, Category 3

Label Elements

Hazard Pictogram(s):



Signal Word: DANGER

Hazard Statements:

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H341 Suspected of causing genetic defects

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

Precautionary Statements:

Prevention

P201 Obtain special instruction before use P202 Do not handle until all safety precautions have been read and understood P260 Do not breathe dust/fumes/gas/mists/vapors/spray P264 Wash hands thoroughly after handling 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. P308 + P313 IF exposed or concerned: Get medical advice/attention P310 Immediately call a POISON CONTROL CENTER or doctor P333 + P313 If skin irritation or rash occurs: Get medical attention/advice P362 + P364 Take off contaminated clothing and wash it before reuse. Storage P405 Store locked up. Disposal

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

Other Hazards

None known.

. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS #	CONCENTRATION (%)
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated	68683-29-4	10-30
Polyoxypropylenediamine	9046-10-0	10-30
Benzyl alcohol	100-51-6	10-30
Non-hazardous	NA	7-13
Reaction products of triethylenetetramine with phenol and formaldehyde	32610-77-8	7-13
Triethylenetetramine	112-24-3	7-13
Phenol, 2,4,6-tris[(dimethylamino)methyl] reaction products with triethylenetetramine	1101788-77-5	1-5
Synthetic amorphous pyrogenic silica	112945-52-5	5-10
Hydroxybenzene	108-95-2	1-5
Benzene-1,3-dimethanamine	1477-55-0	1-5
Polymer of epichlorohydrin / bisphenol A and diethylenetriamine	31326-29-1	1-5
Diethylenetriamine	111-40-0	1-5

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.

4. FIRST AID MEASURES

5. FIRE FIGHTING MEASURES

Use full-body protective gear and a self-contained breathing apparatus. Use of water may generate toxic aqueous solutions. Do not allow water run-off from fighting fire to enter drains or other water courses.

6. ACCIDENTAL RELEASE MEASURES

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

ENVIRONMENTAL PRECAUTIONS:...... Prevent from entering into soil, ditches, sewers, waterways and

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.

groundwater. See Section 12 for environmental impact information.

HANDLING AND STORAGE

moisture. Keep container tightly closed. Store in a secure location with restricted access or store locked up. Store away from incompatible materials and conditions listed in Section 10.

material. Avoid exposure to concentrated vapors. Avoid skin and eve contact. 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.

EXPOSURE CONTROLS/PERSONAL PROTECTION

exposures below established limits.

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

butyl rubber or natural rubber) and full body-covering clothing.

below established limits, use a NIOSH approved respirator with an organic vapor cartridge, organic vapor cartridge + P100, or a multi-contaminant cartridge, depending on specific workplace conditions. Consult with your respirator and cartridge supplier to ensure proper selection of respirator and cartridge based on ingredients listed in Section 3 and specific workplace conditions. Use and select a respirator according the guidelines established in OSHA 1910.134 or other applicable respiratory protection standard.

wash. Wash thoroughly after use. Contact lens should not be worn when working with this material. Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions.

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
2-Propenenitrile, polymer with 1,3-		No data available
butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-		
piperazinyl)ethyl]amino]butyl-terminated	68683-29-4	
Polyoxypropylenediamine	9046-10-0	No data available
Benzyl alcohol	100-51-6	10 ppm TWA (WEEL)
Non-hazardous	NA	No data available
Reaction products of triethylenetetramine with phenol and formaldehyde	32610-77-8	No data available
Triethylenetetramine	112-24-3	AIHA WEEL: 1 ppm ; 6 mg/ m3; Absorbed via skin
Phenol, 2,4,6-tris[(dimethylamino)methyl]		(Reference Triethylenetetramine, CAS# 112-24-3)
reaction products with triethylenetetramine	1101788-77-5	AIHA WEEL: 1 ppm ; 6 mg/ m3; Absorbed via skin
		Amorphous silica: OSHA PEL 6 mg/m ³
Synthetic amorphous pyrogenic silica	112945-52-5	Dust and PNOS: ACGIH 10mg/m ³ , TWA, Inhalable; 3 mg/m ³ , TWA, Respirable; OSHA PEL 15 mg/m ³ , TWA, total dust; 5 mg/m ³ , TWA, Respirable
Hydroxybenzene	108-95-2	ACGIH TWA: 5 ppm; 19 mg m ³ ; BEI [®] Index Substance
		NIOSH REL: 5 ppm; 19 mg/ m ³
		OSHA PEL: 5 ppm; 19 mg m ³ ; Table Z-1
		NIOSH CEILING: 15.6 ppm; 60 mg/m ³ ; Danger of cutaneous absorption
		0.1 mg/m3 SKIN, Ceiling NIOSH; OSHA Z1A
Benzene-1,3-dimethanamine	1477-55-0	Remarks: potential for skin absorption
Polymer of epichlorohydrin / bisphenol A	31326-29-1	No data available

WEST SYSTEM[®] SIX10 Part B Hardener

	and diethylenetriamine		
	Diethylenetriamine	111-40-0	ACGIH TWA 1ppm; SKIN
9.	PHYSICAL AND CHEMICAL PROPERTIES		

DUVERAL FORM.	
PHYSICAL FORM:	
COLOR:	
ODOR:	
ODOR THRESHOLD:	No data available.
pH	
MELTING POINT / FREEZING POINT	No data available.
BOILING POINT (760mm/Hg):	No data available.
FLASH POINT:	> 300°F(149°C) estimated based similar product.
AUTO IGNITION TEMPERATURE	
LOWER EXPLOSIVE LIMIT (LEL)	No data available.
UPPER EXPLOSIVE LIMIT (UEL)	
VAPOR PRESSURE	
SPECIFIC GRAVITY/DENSITY (water = 1)	
BULK DENSITY	
VAPOR DENSITY (air = 1)	
EVAPORATIOIN RATE (Butyl Acetate = 1)	No data available.
WATER SOLUBILITY (% BY WT.)	No data available.
PARTITION COEFFICIENT, n-OCTANOL/WATER (log Pow)	No data available.
KINEMATIC VISCOSITY:	
DECOMPOSITION TEMPERATURE:	No data available
	ASTM 2369-07 was used to determine the Volatile Matter Content of mixed
epoxy resin and hardener. The combined VOC content for the resin	and hardener system is listed below.

	VOC C	ontent
Resin/Hardener	<u>(g/L)</u>	(lbs/gal)
610A/610B	. 11.8	0.10

10. STABILITY AND REACTIVITY

mixed with an epoxy resin will cause irreversible polymerization with significant heat buildup. Strong acids can cause polymerization.

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, ignition sources.

decomposition. Decomposition products may include, but not limited to: oxides of nitrogen, oxides of carbon, volatile amines, ammonia, nitric acid, aldehydes, nitrosamines.

11. TOXICOLOGICAL INFORMATION

Ingredient Name	CAS#	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
2-Propenenitrile, polymer with 1,3-butadiene, 1- cyano-1-methyl-4-oxo-4-[[2-(1-		>15,400 mg/kg	>3000 mg/kg	No data available
piperazinyl)ethyl]amino]butyl-terminated	68683-29-4			
Polyoxypropylenediamine	9046-10-0	2855 mg/kg	2980 mg/kg	>0.74 mg/L 8h vapor
Benzyl alcohol	100-51-6	1620 mg/kg	No data available	>4.18 mg/l 4h aerosol
Non-hazardous	NA	No data available	No data available	No data available
Reaction products of triethylenetetramine with phenol and formaldehyde	32610-77-8	No data	No data	No data
Triethylenetetramine	112-24-3	1716 mg/kg	1465 mg/kg	No data
Phenol, 2,4,6-tris[(dimethylamino)methyl] reaction products with triethylenetetramine	1101788-77-5	1716 mg/kg (reference Triethylenetetramine)	1465 mg/kg	No data
Synthetic amorphous pyrogenic silica	112945-52-5	>5000 mg/kg	>2000 mg/kg	No data
Hydroxybenzene	108-95-2	317 mg/kg	630 mg/kg (solid)	0.9 mg/l; 8h
Benzene-1,3-dimethanamine	1477-55-0	980 mg/kg	2000 mg/kg	1.34 mg/l 4h mist / aerosol
Polymer of epichlorohydrin / bisphenol A and diethylenetriamine	31326-29-1	1620 mg/kg	No data available	No data available
				¹ 0.07-0.3 mg/l 4h

Diethylenetriamine	111-40-0	1080 r	пд/кд	1090 mg/kg	mist/aeroso
^{1.} LC50 data has been generated for this not been determined that this data directl foreseeable or anticipated conditions of u	y correlates to an inherent h				
ACUTE TOXICITY: based on acute toxicity estimation metho	ds using ingredient data.				
Oral:acute dermal toxicity classifica Dermal:acute dermal toxicity classifica Absorption of phenolic solution spleen, and cause edema of the Inhalation:	tion criteria. Ingestion may tion criteria. However, prod as through the skin may be ne lungs.	result in gastrointest Not classified. Bas uct contains materia very rapid and can c	inal irritation or u sed on available Is that are readily ause damage to	Icer. data product does / absorbed through the kidneys, liver, p	not meet the skin. pancreas,
SKIN CORROSION / IRRITATION: immediate. May cause persistent irritati		Category 1B. Cau	ses severe skin l	ourns. Effects may	be
SERIOUS EYE DAMAGE / IRRITATION vision. May cause corneal damage result			es serious eye da	amage. May cause	blurred
RESPIRATORY SENSITIZATION:		Not classified. Bas	sed on available o	data this product do	oes not
SKIN SENSITIZATION:		Category 1. May c	ause allergic ski	n reaction.	
REPRODUCTIVE TOXICITY:		Not classified. Bas	sed on available	data this product de	oes not meet
MUTAGENICITY:		Category 2. This p	product contains	a substance (pheno	ol, CAS# 108-95-
CARCINOGENICITY:		Not classified. Bas	sed on available	data this product de	oes not meet
SPECIFIC TARGET ORGAN TOXICITY classification criteria. However, it is antici respiratory track and may cause central r	pated that inhalation of cond				
SPECIFIC TARGET ORGAN TOXICITY through the skin. Absorption of phenolic s spleen, and cause edema of the lungs.					
ASPIRATION HAZARD:		Not classified. Bas	sed on available	data this product do	oes not meet
OTHER HEALTH HAZARD INFORMATI by inhalation when aerosolized due to sp sprayed or heated. While this product do aggravation of existing respiratory conditi	raying or when a mist is forr es not meet the classificatio	ned due to heating.	It is advised that	exposure not occu	r to product that is
ECOLOGICAL INFORMATION					
ACUTE AQUATIC TOXICITY: available for the mixture. Calculated estir	nate based on ingredient da	Category 3 – Harn ta. Avoid release to	nful to aquatic life	e. No specific test c	lata is
CHRONIC AQUATIC TOXICITY:					
PERSISTANCE AND BIODEGRADABIL	ITY:	No specific test da	ata available for t	he mixture.	

Ingredient	CAS#	Ecotoxicity Classification Information
2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-		No data available
methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-		
terminated	68683-29-4	
Polyoxypropylenediamine	9046-10-0	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 2
Benzyl alcohol	100-51-6	No data available

WEST SYSTEM® SIX10 Part B Hardener

Non-hazardous	NA	No data available
Reaction products of triethylenetetramine with phenol and formaldehyde	32610-77-8	Aquatic Chronic Cat. 3
Triethylenetetramine	112-24-3	Aquatic Chronic Cat. 3
Phenol, 2,4,6-tris[(dimethylamino)methyl] reaction products with triethylenetetramine	1101788-77-5	(Reference Triethylenetetramine); Aquatic Chronic Cat. 3
Synthetic amorphous pyrogenic silica	112945-52-5	No data available
Hydroxybenzene	108-95-2	Aquatic Acute Cat. 3; Aquatic Chronic Cat. 2
Benzene-1,3-dimethanamine	1477-55-0	Acute Aquatic Cat. 3; Chronic Aquatic Cat. 3
Polymer of epichlorohydrin / bisphenol A and	31326-29-1	
diethylenetriamine		No data available
Diethylenetriamine	111-40-0	No data available

13. DISPOSAL CONSIDERATIONS

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

15. REGULATORY INFORMATION

COUNTRY	INVENTORY LIST	STATUS
United States	TSCA	All ingredients are listed or otherwise compliant.
Europe	EINECS or ELINCS	No data available on CAS# 1101788-77-5. All other ingredients are listed or otherwise compliant.
Canada	CEPA (DSL/NDSL)	CAS# 1101788-77-5 listed on NDSL only. All other ingredients are listed or otherwise compliant.
Australia	AICS	No data available on CAS# 1101788-77-5. All ingredients are listed or otherwise compliant.
Japan	ENCS	No data available on CAS# 1101788-77-5. All ingredients are listed or otherwise compliant.
South Korea	KECI	No data available on CAS# 1101788-77-5. All ingredients are listed or otherwise compliant.
China	IECSC	All ingredients are listed or otherwise compliant. Notification registration complete for CAS# 1101788-77-5.

WEST SYSTEM® SIX10 Part B Hardener

Philippines	PICCS	No data available o compliant.	on CAS# 1101788-77-5. All ingredients are listed or otherwise
S EPA TSCA Re	equirements:	No data	a available.
anada WHMIS C	onfidential Business Inf	formation (CBI)No data	available.
Subject to Se has a particle or 4. Subject to Se Subject to Se Subject to Se	ection 302 (TPQ) e size of less than 100 mic ection 304 (RQ) ection 311 or 312 ection 313	rons or is handled in solution or m Phenol Refer to This pro	= 500/1000 (lbs.). TPQ = 500 lbs. if phenol is in powder form and notten form, or meets the criteria for a NFPA reactivity rating of 2, 3 RQ = 1000 lbs. o the health and physical classifications in section 2. oduct contains hydroxybenzene (phenol) and is subject to the ments and Reauthorization Act of 1986 and 40 CFR Part 372.
	agency.		or details on state regulatory requirements you should contact the STATE CODE
riethylenetetrami 12-14-3 enzene-1,3-dime 477-55-0			PA, MA, NJ MA, PA, NJ
ydroxybenzene)8-95-2 iethylenetriamine 11-40-0 morphous silica			PA, MA, NJ, IL, RI PA
631-86-9 or 1129	45-52-5		PA, NJ, MA

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

16. OTHER INFORMATION

REASON FOR ISSUE:	Update to Section 15.
PREPARED BY:	
SDS CONTACT:	safety@gougeon.com
TITLE:	
APPROVAL DATE:	January 3. 2022
SUPERSEDES DATE:	January 15, 2019
SDS VERSION:	610B-2022a

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

Information in this document is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Gougeon Brothers, Inc. The data on this sheet is related only to the specific material designated herein. Gougeon Brothers, Inc. assumes no legal responsibility for use or reliance upon these data.