# MATERIAL SAFETY DATA SHEET West System Inc.

# WEST SYSTEM® 105-K

This MSDS series includes the individual MSDS appropriate for the West System 105-K kit product. The products within the 105-K kit for which there is an MSDS are as follows:

WEST SYSTEM 105 Epoxy Resin®
WEST SYSTEM 205 Fast Hardener®
WEST SYSTEM 406 Colloidal Silica
WEST SYSTEM 410 Microlight®
WEST SYSTEM 745 Glass Fabric

PRODUCT NAME: WEST SYSTEM® 105 Epoxy Resin

**PRODUCT CODE**:.....105

CHEMICAL FAMILY: ..... Epoxy Resin.

CHEMICAL NAME: ..... Bisphenol A based epoxy resin.

FORMULA: ......Not applicable.

MANUFACTURER: EMERGENCY TELEPHONE NUMBERS:

West System Inc. 102 Patterson Ave. Bay City, MI 48706, U.S.A.

2 Patterson Ave. CHEMTREC:......800-424-9300 (U.S.)

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

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

Transportation

703-527-3887 (International)

Last Revised: 03MAY13

WARNING May cause skin irritation. May cause eye irritation. May cause allergic reaction. Clear, viscous liquid with mild odor.

PRIMARY ROUTE(S) OF ENTRY: ...... Skin contact.

### **POTENTIAL HEALTH EFFECTS:**

**ACUTE INHALATION:**If product is heated, vapors generated can cause headache, nausea, dizziness and possible respiratory irritation if inhaled in high concentrations.

**ACUTE SKIN CONTACT:**May cause allergic skin response in certain individuals. May cause moderate irritation to the skin such as redness and itching.

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

INGESTION: Low acute oral toxicity.

**SYMPTOMS OF OVEREXPOSURE:**Possible sensitization and subsequent allergic reactions usually seen as redness and rashes.

# 3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	<u>CAS #</u>	CONCENTRATION (%)
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	25085-99-8	60-100
Benzyl alcohol	100-51-6	10-30
Phenol-formaldehyde polymer glycidyl ether	28064-14-4	1-10

### 4. FIRST AID MEASURES

### 5. FIRE FIGHTING MEASURES

FLASH POINT: >200°F (Tag Closed Cup)

**EXTINGUISHING MEDIA:** Foam, carbon dioxide (CO<sub>2</sub>), dry chemical. protective equipment. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. combustion products of varying composition which may be toxic and/or irritating. Combustion products may include, but are not limited to: phenolics, carbon monoxide, carbon dioxide. **ACCIDENTAL RELEASE MEASURES** sand) and collect in a suitable, closed container. Warm, soapy water or non-flammable, safe solvent may be used to clean residual. 7. HANDLING AND STORAGE STORAGE: Store in cool, dry place. Store in tightly sealed containers to prevent moisture absorption and loss of volatiles. Excessive heat over long periods of time will degrade the resin. Launder contaminated clothing before reuse. Avoid inhalation of vapors from heated product. Precautionary steps should be taken when curing product in large quantities. When mixed with epoxy curing agents this product causes an exothermic, 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** 8. EYE PROTECTION GUIDELINES: Safety glasses with side shields or chemical splash goggles. butyl rubber or natural rubber) and full body-covering clothing. NIOSH/MSHA approved respirator with an organic vapor cartridge whenever exposure to vapor in concentrations above applicable limits is likely. Note: West System, Inc. has conducted an air sampling study using this product or similarly formulated products. The results indicate that the components sampled for (epichlorohydrin, benzyl alcohol) were either so low that they were not detected at all or they were significantly below OSHA's permissible exposure levels. 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. Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use Exposure Level (PEL) or the ACGIH Guidelines for information on specific ingredients. PHYSICAL AND CHEMICAL PROPERTIES PHYSICAL FORM: Liquid. COLOR: ...... Clear. ODOR: Mild. **BOILING POINT:** > 400°F MELTING POINT/FREEZE POINT: No data. ......No data. SOLUBILITY IN WATER: ...... Slight. **SPECIFIC GRAVITY:**......1.15 BULK DENSITY: 9.6 (pounds/gallon) VAPOR PRESSURE: .....< 1 mmHg @ 20°C. VAPOR DENSITY: Heavier than air. epoxy resin and hardener. Refer to the hardener's MSDS for information about the total volatile content of the resin/hardener system. STABILITY AND REACTIVITY STABILITY: Stable. HAZARDOUS POLYMERIZATION: ...... Will not occur by itself, but a mass of more than one pound of product plus an aliphatic amine will cause irreversible polymerization with significant heat buildup. INCOMPATIBILITIES: Strong acids, bases, amines and mercaptans can cause polymerization.

DECOMPOSITION PRODUCTS:	. Carbon monoxide,	carbon dioxide and phenolics	may be produced du	ring
uncontrolled exothermic reactions or when otherwise heated to decom	nposition.			

### 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<sub>50</sub> >5000 mg/kg (rats)

Inhalation: ......No Data.

REPRODUCTIVE EFFECTS: ......DGEBPA, in animal studies, has been shown not to interfere with reproduction.

MUTAGENICITY: .......DGEBPA in animal mutagenicity studies were negative. In vitro mutagenicity tests were negative in some cases and positive in others.

### CARCINOGENICITY:

NTP Product not listed.

IARC Product not listed.

OSHA Product not listed.

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

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). Note: It is unlikely that normal use of this product would result in measurable exposure concentrations to this substance.

### 12. ECOLOGICAL INFORMATION

In the non-cured liquid form this product may cause long-term harm if released to the environment. Prevent entry into sewers and natural waters.

# Movement and Partitioning:

Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Kow between 3 and 5).

### Degradation and Transformation:

Theoretical oxygen demand is calculated to be 2.35 p/p. 20-day biochemical oxygen demand is <2.5%.

### Ecotoxicology:

Material is moderately toxic to aquatic organisms on an acute basis. LC50/EC50 between 1 and 10 mg/L in most sensitive species.

## 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

### DOT Non-Bulk

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

### **IMDG**

SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
TECHNICAL SHIPPING NAME: Epoxy Resin.
HAZARD CLASS: Class 9.
U.N. NUMBER: UN3082.
PACKING GROUP: PG III.
EmS Number: F-A, S-F
MARINE POLLUTANT Yes

ICAO/IATA

SHIPPING NAME: Environmentally hazardous substance, liquid, n.o.s.
TECHNICAL SHIPPING NAME: Epoxy Resin.
HAZARD CLASS: Class 9.
U.N. NUMBER: UN3082.
PACKING GROUP: PG III.
MARINE POLLUTANT: Yes

### 15. REGULATORY INFORMATION

OSHA STATUS: Irritant.
TSCA STATUS: All components are listed on TSCA inventory or otherwise comply with TSCA requirements.

Canada WHMIS Classification: D2B - Toxic material causing other toxic effects.

CEPA Chemical Inventory Status: All components are listed or are otherwise compliant with CEPA requirements.

**SARA TITLE III:** 

SECTION 313 TOXIC CHEMICALS ...... None (deminimus).

### 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	< 5ppm	<sup>1</sup> CA
Benzyl alcohol		MA. PA. NJ
100-51-6		IVIA. PA. IVIJ

<sup>1.</sup> These substances are known to the state of California to cause cancer or reproductive harm, or both.

### 16. OTHER INFORMATION

REASON FOR ISSUE:

PREPARED BY:

G. M. House

APPROVED BY:

G. M. House

ITILE:

Health, Safety & Environmental Manager

APPROVAL DATE:

SUPERSEDES DATE:

March 9, 2012

MSDS NUMBER:

Changes made in Section 14 and 15.

G. M. House

House

Health, Safety & Environmental Manager

April 26, 2013

SUPERSEDES DATE:

March 9, 2012

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PRODUCT NAME: ......WEST SYSTEM® 205 Fast Hardener

 PRODUCT CODE:
 205

 CHEMICAL FAMILY:
 Amine.

CHEMICAL NAME:......Modified aliphatic polyamine.

FORMULA: ...... Not applicable.

MANUFACTURER: EMERGENCY TELEPHONE NUMBERS:

West System Inc. 102 Patterson Ave. Bay City, MI 48706, U.S.A.

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

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

Transportation

DANGER Causes burns to eyes and skin. Harmful if swallowed. Harmful if absorbed through the skin. May be harmful if inhaled. May cause allergic reaction. Amber colored liquid with ammonia odor.

### **POTENTIAL HEALTH EFFECTS:**

**CHRONIC INHALATION:**May cause respiratory tract irritation, coughing, sore throat, shortness of breath or chest pain.

**EYE CONTACT:**Moderate to severe irritation with possible tissue damage. Concentrated vapors can be absorbed in eye tissue and cause eye injury. Contact causes discomfort and possible corneal injury or conjunctivitis.

**INGESTION:**Single dose oral toxicity is moderate. May cause gastrointestinal tract irritation and pain. Aspiration hazard.

**SYMPTOMS OF OVEREXPOSURE:**Respiratory tract irritation. Skin irritation and redness. Possible allergic reaction seen as hives and rash. Eye irritation. Possible liver and kidney disorders upon long term skin absorption overexposures.

### 3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS#	<b>CONCENTRATION (%)</b>
Reaction products of triethylnetetramine with phenol/formaldehyde	32610-77-8	40-70
Polyethylenepolyamine	68131-73-7	10-30
Triethylenetetramine	112-24-3	5-20
Hydroxybenzene	108-95-2	1-10
Reaction Products of triethylenetetramine and propylene oxide	26950-63-0	1-10
Tetraethylenepentamine	112-57-2	1-10

### 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.

5.	FIRE FIGHTING MEASURES	
	FLASH POINT:	>270°F (PMCC)
	EXTINGUISHING MEDIA: powder.	Dry chemical, alcohol foam. carbon dioxide (CO <sub>2</sub> ), dry sand, limestone
	combustion products of varying composition which may be toxic and/of nitrogen, carbon monoxide, carbon dioxide, volatile amines, ammo	During a fire, smoke may contain the original materials in addition to or irritating. Combustion products may include, but are not limited to: oxides nia, nitric acid, nitrosamines. When mixed with sawdust, wood chips, or ertain conditions. Heat is generated as the air oxidizes the amine. If the heat
	SPECIAL FIRE FIGHTING PROCEDURES: Use of water may generate toxic aqueous solutions. Do not allow wa	Use full-body protective gear and a self-contained breathing apparatus. ter run-off from fighting fire to enter drains or other water courses.
6.	ACCIDENTAL RELEASE MEASURES	
	inert, non-combustible absorbent material (e.g., sand, clay) and show	Stop leak without additional risk. Wear proper personal protective and pump into appropriate container for recovery. Small spill - recover or use el into suitable container. Do not use sawdust, wood chips or other cellulosic istion 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).
	STORAGE: container tightly closed.	Store in cool, dry place away from high temperatures and moisture. Keep
	material. Avoid exposure to concentrated vapors. Avoid skin contact	Use with adequate ventilation. Do not breath vapors or mists from heated tt. Wash thoroughly after handling. When mixed with epoxy resin this roduce enough heat to damage or ignite surrounding materials and emit
8.	EXPOSURE CONTROLS/PERSONAL PROTECTION	
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% VOLATILE BY WEIGHT	
	105 Resin and 205 Hardener, mixed together at 5:1 by weight, has a density of 1137 g/L (9.49 lbs/gal). The combined
VOC content for 105/205 is	7.91 g/L (0.07 lbs/gal).

### 10. STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

**INCOMPATIBILITIES:** Avoid excessive heat. Avoid excessive heat. Avoid excessive heat organic compounds (e.g., methylene chloride). External heating or self-heating could result in rapid temperature increase and serious hazard. If such a reaction were to take place in a waste drum, the drum could expand and rupture violently.

### 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.

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

## 12. ECOLOGICAL INFORMATION

In the non-cured, liquid form, this product may be harmful if released to the environment. 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.

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

# 14. TRANSPORTATION INFORMATION

### DOT Non-Bulk

SHIPPING NAME: Polyamines, liquid, corrosive, n.o.s.
TECHNICAL SHIPPING NAME: Triethylenetetramine
HAZARD CLASS: Class 8
U.N./N.A. NUMBER: UN 2735
PACKING GROUP: PG III
MARINE POLLUTANT: No

### ICAO/IATA

SHIPPING NAME: Polyamines, liquid, corrosive, n.o.s.
TECHNICAL SHIPPING NAME: Triethylenetetramine
HAZARD CLASS: Class 8
U.N. NUMBER: UN 2735

PACKING GROUP: PG III
MARINE POLLUTANT: No

### IMDG

SHIPPING NAME: Polyamines, liquid, corrosive, n.o.s.
TECHNICAL SHIPPING NAME: Triethylenetetramine
HAZARD CLASS: Class 8
U.N. NUMBER: UN 2735
PACKING GROUP: PG III

EmS Number:F-A, S-B
MARINE POLLUTANT No

### 15. REGULATORY INFORMATION

OSHA STATUS: Corrosive; possible sensitizer.

TSCA STATUS: All components listed on TSCA inventory or otherwise comply with TSCA

requirements.

Canada WHMIS Classification: D2A – Very toxic material causing other toxic effects; E – Corrosive.

CEPA Chemical Inventory Status: All components are listed or are otherwise compliant with CEPA

requirements.

SARA TITLE III:

# 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** 

108-95-2 NJ, RI, PA, MA, IL

# 16. OTHER INFORMATION

REASON FOR ISSUE:

PREPARED BY:

G. M. House

APPROVED BY:

G. M. House

TITLE:

Health, Safety & Environmental Manager

APPROVAL DATE:

SUPERSEDES DATE:

February 10, 2011

MSDS NUMBER:

205-11a

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PRODUCT NAME: WEST SYSTEM 406 Colloidal Silica.

 PRODUCT CODE:
 406

 CHEMICAL FAMILY:
 Silicon.

CHEMICAL NAME: Silicon dioxide (amorphous).

FORMULA: SiO<sub>2</sub>

MANUFACTURER: EMERGENCY TELEPHONE NUMBERS:

West System Inc. 102 Patterson Ave. Bay City, MI 48706, U.S.A.

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

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

Transportation

CAUTION May pose a static ignition hazard. White, fluffy powder with no odor.

PRIMARY ROUTE(S) OF ENTRY: ...... Inhalation.

### **POTENTIAL HEALTH EFFECTS:**

**ACUTE INHALATION:**If exposure limits are exceeded, the respiratory tract may become irritated. May cause shortness of breath, coughing, and/or chest tightness due to temporarily physically overloading the lungs.

**CHRONIC INHALATION:**May aggravate existing respiratory conditions. May cause dryness of mucous membranes of the respiratory tract.

ACUTE SKIN CONTACT: ...... May cause irritation and dryness.

CHRONIC SKIN CONTACT: Repeated exposure may cause dermatitis due to drying of the skin.

EYE CONTACT: May cause irritation, redness and tearing.

INGESTION: No known health effects.

chapped or irritated skin. Irritated or tearing eyes.

### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**

Skin and respiratory conditions, such as dermatitis and asthma.

### 3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME CAS# CONCENTRATION (%)

Fumed Amorphous Silica 112945-52-5 100

### 4. FIRST AID MEASURES

FIRST AID FOR EYES: Flush adequately with water to remove particles. If discomfort persists,

seek medical advice.

FIRST AID FOR SKIN: Wash with soap and water. Apply moisturizing cream to replenish moisture

in the skin if necessary.

advice.

FIRST AID FOR INGESTION: No specific information.

### 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: ...... Water, dry chemical, halon or foam.

	SPECIAL FIRE FIGHTING PROCEDURES:	information.
6.	S. ACCIDENTAL RELEASE MEASURES	
	SPILL OR LEAK PROCEDURES:	shovel or use properly grounded vacuum equipment. Do so in
7.	7. HANDLING AND STORAGE	
	STORAGE TEMPERATURE (min./max.): 0°F (-17°C)	/100°F (38°C)
	STORAGE: Keep dry.	
	HANDLING PRECAUTIONS:	ling that will unnecessarily generate airborne dust. Properly
8.	3. EXPOSURE CONTROLS/PERSONAL PROTECTION	
	EYE PROTECTION GUIDELINES:	ses or goggles are recommended, depending on the expected
	SKIN PROTECTION GUIDELINES: Areas experior protected by an impervious material to prevent dryness. Barrier creams can be used to prevent dryness.	ected to have repeated exposure, such as hands, may need to be sed effectively.
	RESPIRATORY/VENTILATION GUIDELINES:	
	ADDITIONAL PROTECTIVE MEASURES:	aking, working cleanly and following basic precautionary
	OCCUPATIONAL EXPOSURE LIMITS:	
9.	D. PHYSICAL AND CHEMICAL PROPERTIES	
	PHYSICAL FORM         Powder.           COLOR         White.           ODOR         Odorless.           BOILING POINT         No data.           MELTING POINT/FREEZE POINT         No data.           pH         No data.           SOLUBILITY IN WATER         Insoluble.           SPECIFIC GRAVITY         2.2           BULK DENSITY         0.33 pound           VAPOR PRESSURE         Not Applicate           VAPOR DENSITY         Not Applicate           % VOLATILE BY WEIGHT         0.0 (0.0 g/L	able. able.
10.	0. STABILITY AND REACTIVITY	
	STABILITY: Stable.	
	HAZARDOUS POLYMERIZATION: Will not occ	eur.
	INCOMPATIBILITIES: A chemical	reaction is possible with strong bases or hydrofluoric acid.
	DECOMPOSITION PRODUCTS:	e carbon monoxide (CO) and carbon dioxide (CO <sub>2).</sub>
11.		·
	Oral:	view.
	CARCINOGENICITY:	
	NTPNo.	
	IARC	

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

### 12. ECOLOGICAL INFORMATION

No information.

# 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** This material is determined not to be a hazardous waste as per RCRA standards, either by listing or characteristics. Disposer must comply with all federal, state and local laws. Waste product may be sent to a landfill.

### 14. TRANSPORTATION INFORMATION

DOT I	Non-Bul	lk
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SHIPPING NAME:	Not regulated.
TECHNICAL SHIPPING NAME:	
HAZARD CLASS:	Not applicable.
U.N./N.A. NUMBER:	
PACKING GROUP:	

### **IMDG**

SHIPPING NAME:	Not regulated.
TECHNICAL SHIPPING NAME:	Not applicable.
HAZARD CLASS:	Not applicable.
U.N. NUMBER:	Not applicable.
PACKING GROUP:	Not applicable.
EmS Number:	Not applicable.
MARINE POLLUTANT	

### ICAO/IATA

SHIPPING NAME:	Not regulated.
TECHNICAL SHIPPING NAME:	Not applicable.
HAZARD CLASS:	
U.N. NUMBER:	
PACKING GROUP:	

## 15. REGULATORY INFORMATION

TSCA requirements.

requirements.

SARA TITLE III:

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
Amorphous Silica

112945-52-5 99% MA, NJ, RI

# 16. OTHER INFORMATION

REASON FOR ISSUE:	Changes made in Sections 2

 PREPARED BY:
 G. M. House

 APPROVED BY:
 G. M. House

 APPROVAL DATE:
 April 26, 2013

 SUPERSEDES DATE:
 February 6, 2011

 MSDS NUMBER:
 406-13a

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West System Inc. Page 14 of 22 WEST SYSTEM 105-K

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: WEST SYSTEM 410 Microlight

**PRODUCT CODE:**.....410

CHEMICAL FAMILY: ...... Thermoplastic polymer.

CHEMICAL NAME:......Blend containing thermoplastic and inorganic microspheres.

MANUFACTURER:

West System Inc. Transportation

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

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

**EMERGENCY TELEPHONE NUMBERS:** 

WARNING Can cause respiratory tract irritation. May cause eye irritation. May cause skin irritation. Off-white powder.

### **POTENTIAL HEALTH EFFECTS:**

CHRONIC SKIN CONTACT: May cause sensitization.

INGESTION: Can cause irritation of the gastrointestinal tract.

SYMPTOMS OF OVEREXPOSURE: ...... Irritation of the mouth, nose and throat. Irritated and tearing eyes. Dry,

itchy and irritated skin.

conditions.

# 3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS#	<b>CONCENTRATION (%)</b>
Sodium silicate	1344-09-8	30-60
Acrylic polymer	25214-39-6	30-60
Disodium tetraborate decahydrate	1303-96-4	5-10
Formaldehyde, polymer with 1,3, dimethylbenzene	26139-75-3	5-10
Isobutane	75-28-5	5-15
Synthetic amorphous silica	112945-52-5	1-5
Tris-2,4,6- (dimethylaminomethyl) phenol	90-72-2	1-5

### 4. FIRST AID MEASURES

FIRST AID FOR EYES: Flush with water for at least 15 minutes. If effects persist, consult a

physician.

FIRST AID FOR SKIN: Wash with soap and water.

FIRST AID FOR INGESTION: Do not induce vomiting. Get medical attention if significant amounts are

Last Revised: 03MAY13

# 5. FIRE FIGHTING MEASURES

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

Oral: No Data

Inhalation:.....No Data.

This products contains toluene (at < 0.07%) which is a known reproductive toxic.

### CARCINOGENICITY:

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

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

# 12. ECOLOGICAL INFORMATION

Minimal borate content may cause damage to plants, particularly to citrus crops.

### 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** This material is determined not to be a hazardous waste as per RCRA standards, either by listing or characteristics. Disposer must comply with all federal, state and local laws. Waste product may be sent to a landfill.

# 14. TRANSPORTATION INFORMATION

DOT Non-Bulk	
SHIPPING NAME:	Not regulated.
TECHNICAL SHIPPING NAME:	Not applicable.
HAZARD CLASS:	
U.N./N.A. NUMBER:	
PACKING GROUP	

### **IMDG**

SHIPPING NAME:No	t regulated.
TECHNICAL SHIPPING NAME: No	t applicable.
HAZARD CLASS:No	
U.N. NUMBER:	t applicable.
PACKING GROUP:No	t applicable.
EmS Number:	t applicable.
MARINE POLLUTANT No	t applicable.

### ICAO/IATA

SHIPPING NAME:	Not regulated.
TECHNICAL SHIPPING NAME:	Not applicable.
HAZARD CLASS:	Not applicable.
U.N. NUMBER:	
PACKING GROUP:	

### 15. REGULATORY INFORMATION

OSHA STATUS: ..... Hazardous: Nuisance dust; Possible sensitizer.

CEPA Chemical Inventory Status: All components are listed or are otherwise compliant with CEPA requirements.

TSCA STATUS: All components are included on the TSCA Inventory list or otherwise comply with TSCA requirements.

SARA TITLE III:

SECTION 313 TOXIC CHEMICALS: ...... None (de minimus).

# 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.

CO	MP	ONE	=NI	NAME
	<b>~</b> .			

/CAS NUMBER	CONCENTRATION	STATE CODE
Acrylonitrile 107-13-1	< 0.003%	¹CA, MA, PA, NJ
Vinylidene Chloride 75-35-4	< 0.3%	PA, NJ, MA

# 16. OTHER INFORMATION

REASON FOR ISSUE:

PREPARED BY:

G. M. House
APPROVED BY:

G. M. House
TITLE:

Health, Safety & Environmental Manager
APPROVAL DATE:

May 3, 2013
SUPERSEDES DATE:

May 5, 2011
MSDS NUMBER:

410-13a

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<sup>&</sup>lt;sup>1.</sup> These substances are known to the state of California to cause cancer or reproductive harm, or both.

PRODUCT NAME: WEST SYSTEM 745 Episize Glass Fabric.

CHEMICAL FAMILY: ......Fibrous glass.

FORMULA: No information.

MANUFACTURER: EMERGENCY TELEPHONE NUMBERS:

West System Inc. 102 Patterson Ave. Bay City, MI 48706, U.S.A.

Phone: 866-937-8797 or 989-684-7286 Non-transportation www.westsystem.com Poison Hotlin

Poison Hotline: ...... 800-222-1222

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

Transportation

CAUTION May cause skin irritation. May cause respiratory irritation. White odorless fibers.

PRIMARY ROUTE(S) OF ENTRY: ...... Inhalation, skin contact.

**POTENTIAL HEALTH EFFECTS:** 

ACUTE INHALATION: Mechanical irritant to the upper respiratory tract.

ACUTE SKIN CONTACT: Mechanical and physical irritant.

CHRONIC SKIN CONTACT: No known long term health effects associated with exposure.

EYE CONTACT: Mechanical and physical irritant.

INGESTION: May cause short term mechanical irritation and discomfort to the digestive

tract.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:...... Respiratory and skin conditions, such as asthma and dermatitis.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME CAS# CONCENTRATION (%)

Fibrous glass 65997-17-3 98.8 – 99.9 Chromium (Cr3+), aqua chloro hydroxyl methacrylate complexes 111031-82-4 0.02 – 0.25

4. FIRST AID MEASURES

FIRST AID FOR SKIN: Wash with soap and water.

FIRST AID FOR INHALATION: Remove to fresh air if effects occur. If effects persist, treat symptomatically.

Contact a physician.

FIRST AID FOR INGESTION: No specific instructions.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable.

specific information.

6.	ACCIDENTAL RELEASE MEASURES	
	SPILL OR LEAK PROCEDURES:into a sealed container. A vacuum may be used. Perform in a manne	Sweep and scoop this material with the aid of a dust suppressant and put er that minimizes airborne dust.
7.	HANDLING AND STORAGE	
	STORAGE TEMPERATURE (min./max.):	0°F (-17°C)/100°F (38°C)
	STORAGE:	
	HANDLING PRECAUTIONS:  Keep work area free of accumulated fibers.	Handle in a manner that does not unnecessarily generate airborne fibers.
8.	EXPOSURE CONTROLS/PERSONAL PROTECTION	
	EYE PROTECTION GUIDELINES:level of exposure.	Safety glasses with side shields or goggles, depending on the expected
		Use protective clothing not easily penetrated by the glass fibers, such as a Skin irritation will primarily occur at pressure points where there is friction, a these areas. Some barrier creams can be used effectively.
		. Work environments should be maintained below applicable exposure levels ventilation or containment. If this is not feasible, use a NIOSH approved
	ADDITIONAL PROTECTIVE MEASURES:	
	OCCUPATIONAL EXPOSURE LIMITS:Otherwise Classified (PNOC). Refer to OSHA's Permissible Exposure	This product should be treated as a nuisance particulate or Particulate Not e Level (PEL) or the ACGIH Guidelines for information on specific ingredients.
9.	PHYSICAL AND CHEMICAL PROPERTIES	
	PHYSICAL FORM COLOR ODOR BOILING POINT MELTING POINT/FREEZE POINT	White. Odorless. No data.
	pHSOLUBILITY IN WATER SPECIFIC GRAVITY BULK DENSITY VAPOR PRESSURE	Negligible. No data. No data.
	VAPOR DENSITY % VOLATILE BY WEIGHT	Not applicable.
10.	STABILITY AND REACTIVITY	
	STABILITY:	Stable.
	HAZARDOUS POLYMERIZATION:	. Will not occur.
	INCOMPATIBILITIES:	. None known.
	DECOMPOSITION PRODUCTS:and toxic fumes.	. Thermal decomposition of glass fabric coating may cause irritating smoke
11.	TOXICOLOGICAL INFORMATION	
_	CARCINOGENICITY: NTP	No
	IARCOSHA	No.

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

The International Agency for Research on Cancer (IARC) in June 1987, categorized fiber glass continuous filament as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify fiber glass continuous filament as a possible, probable, or confirmed carcinogen. Studies are continuing.

### 12. ECOLOGICAL INFORMATION

This material is not expected to cause harm to animals, plants or fish.

### 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Knowledge of materials reveals that this product is not a hazardous waste in its purchased form as per RCRA criteria, either by characteristics or by listing. However, it is the responsibility of the end user to determine proper disposal methods. Landfill is the preferred disposal method for this product.

### TRANSPORTATION INFORMATION 14.

# **DOT Non-Bulk**

TECHNICAL SHIPPING NAME: ...... Not applicable. HAZARD CLASS: Not applicable. 

### **IMDG**

SHIPPING NAME:......No regulated. HAZARD CLASS:...... Not applicable. PACKING GROUP: ...... Not applicable 

U.N. NUMBER: ...... Not applicable. MARINE POLLUTANT: ...... Not applicable.

### REGULATORY INFORMATION

OSHA STATUS: ...... Nuisance dust.

TSCA STATUS: All ingredients are included on the TSCA inventory list.

CEPA Chemical Inventory Status: All components are listed or are otherwise compliant with CEPA

requirements.

SARA TITLE III:

SECTION 313 TOXIC CHEMICALS ...... None (deminimus).

### **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 known.

# 16. OTHER INFORMATION

REASON FOR ISSUE: Changes made in sections 3 and 15.

APPROVED BY: ...... G. M. House

......Health, Safety & Environmental Manager

SUPERSEDES DATE: February 10, 2011

**MSDS NUMBER:**......745-13a.

Last Revised: 03MAY13

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This page (intentionally left blank) represents the last page of the MSDS series for the WEST SYSTEM 105-K kit product.