

TYPE 2 Flake Flooring System		
Proper Name	Use within System	Name on General MSDS List
101 Resin (SR 101 and SH101)	Body matrix for Aggregate Build Coat(s)	SR101 and SH 101
TRP 354	Body Coat	CRH 405
Flakes	Aggregates and System Color	Chips
200C A and 200 C B	Grout coat	200C A and 200C B
UV13	Seal Coat	UV13

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek 200C A (Iso) Chemtrec
GENERIC NAME: Aspartic Ester 24 Hour Emergency Number 1-800-424-9300
Information Number 1- 920-803-1700

DISTRIBUTOR: LSP Performance Resins
 124 Speer Road
 Chestertown, MD 21620

Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview
OSHA Hazardous
 Skin sensitizer, Skin, Eye, Respiratory Irritant, Digestive Tract Irritant

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Eye Irritation	Category 2A	Not Classified	Not Classified
Respiratory Sensitization	Category 1		
Skin Sensitization	Category 1		

Pictogram:




Hazard Statements	Precautionary Statements
H317 May cause an allergic skin reaction H319 Causes serious eye irritation H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/eye protection/face protection. P285 In case of inadequate ventilation wear respiratory protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 If skin irritation or rash occurs get medical advice/ attention. P337 + P311 If eye irritation persists: Get medical advice/ attention. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician P363 Wash contaminated clothing before reuse. P501 Dispose of containers in accordance with local/regional/national/international requirements.

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
Hexane,1,6-diisocyanate, -Homopolymer	28182-81-2	100 %
Hexamethylene Diisocyanate (HDI)	822-06-0	< 0.5

SECTION 4 First Aid Measures

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 15 minutes. Retract eyelids often. Get prompt medical attention. Can cause pain, tearing, reddening, and swelling accompanied by a stinging sensation. Chronic exposure can cause corneal opacity.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

May be harmful if absorbed through the skin. Symptoms of irritation may be reddening swelling, rash, scaling or blistering. May cause sensitization and allergic reaction.

Ingestion: If victim is conscious and alert, give 2 - 3 glasses of water to drink and induce vomiting by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than the waist if vomiting occurs and the victim is conscious; give water to further dilute the chemical.

May be harmful if swallowed. Can cause irritation and possible corrosive action to the mouth, stomach tissue and digestive tract.

Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention immediately. May cause shortness of breath, headache, nausea, vomiting, respiratory tract irritation.

Advise to physicians: All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Exposure may aggravate asthma and other respiratory disorders (bronchitis, emphysema, and hyperactivity) skin allergies and eczema.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

Product will burn under fire conditions. Under fire conditions, toxic, corrosive fumes are emitted including nitrogen and carbon oxides. Use water to cool tightly closed containers exposed to fire. Self contained breathing apparatus and full protective clothing is required when smoke or fumes are generated.

Suitable extinguishing media

Dry Chemical, CO2, Foam, **WATER IS NOT** recommended.

Hazardous Decomposition Products

Thermal decomposition may produce nitrogen oxides and carbon oxides.

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Use water spray/fog for cooling tightly sealed containers. Notify authorities if liquid enters sewer/public waters.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air. Prevent runoff from entering drains, sewers, or streams. Dispose/report per regulatory requirements. See Section 1 for emergency contact information and Section 13 for waste disposal.

Methods and Materials for Containment and Cleaning Up

Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into disposal container. Pump free liquid into an appropriate closed container. Clean up spill area with a decontamination solution made up of 50% isopropanol, 45% water and 5% concentration ammonia solution (% by Weight). The solution should cover the area for at least one hour. Absorb with an inert absorbent. Collect washing for disposal. Dispose/report per regulatory requirements. **Do not** flush into drains.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe the vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage

This material is stable under normal handling and storage conditions. Maximum storage temperature is < 40 C (104 F). Store in a dry, well ventilated area. Store, transfer and handle under a blanket of nitrogen. Before closing partially empty containers, blanket with dry nitrogen. Replace damaged gaskets.

Store in tightly closed containers. Store in original container. Recommended container material: aluminum, epoxy coated steel, stainless steel, plastic. Container material to avoid, copper, tin.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
Hexane,1,6-diisocyanate, -Homopolymer	NE	NE	NE	
Hexamethylene Diisocyanate (HDI)	NE	NE	ACGIH 0.005 ppm	

Engineering Controls

Local exhaust ventilation may be required in addition to general room ventilation. Good industrial hygiene practice dictates that worker protection be achieved through ventilation whenever feasible.

Respiratory Protections

Where respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations. Full-face air purifying respirators are required in work environments where isocyanate airborne concentrations exceed the action level but are significantly lower than the IDLH provided that the cartridges are changed daily. Use combination HEPA Filter for the polyisocyanate aerosol and an organic vapor cartridge for the solvents used. Full face supplied air respirators (SAR) are required in work environments where isocyanate airborne concentrations have not been characterized or are expected to exhibit considerable and sudden variations such as in spray type application. Curing ovens must be ventilated to prevent emissions to the workplace.

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Precautions must be taken so that persons handling this product do not allow contact with eyes or skin. In spray operations protection must be afforded against exposure to both vapor and spray mists.

Use good personal hygiene practices. Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is being used. Wash hands before eating, drinking, smoking or using toilet facilities. Wash exposed skin promptly to remove accidental splashes or contact with these materials. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Viscous Liquid
Color	Clear to Pale yellow
pH	Not available
Melting/Freezing Temperature	67 C (152 F)
Boiling Point	255 C (491 F)
Flash Point	170 C/ 338 F
Ignition Temperature	Not available
Autoignition Temperature	454 C (849 F)
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.001 mm Hg at 20 C
Vapor Density (air=1)	5.8 Air = 1
Specific Gravity (water=1 @39.2F)	1.13 at 20 C/68F
Evaporation Rate (Bac=1)	Not available
Odor	Odorless
Odor threshold	Not available

SECTION 10 Stability and Reactivity

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Stable under normal processing conditions.

Conditions to Avoid

Reacts violently with common materials including water, alcohols, bases and amines.

Materials to Avoid

Store away from water, alcohols, bases, and amines.

Hazardous Decomposition Products

Thermal decomposition may produce nitrogen oxides and carbon oxides

SECTION 11 Toxicological Information			
Acute Toxicity hexamethylene diisocyanate			
Oral LD50 – lethal concentration 50% of test species	Rat		> 5,000 mg/kg
Dermal LD50 – lethal concentration 50% of test species	Rabbit		> 2,000 mg/kg
Inhalation LD50 – lethal concentration 50% of test species	Rat		2.18 mg/l – 4 hr
Skin Corrosion/Irritation			
Skin	Rabbit		Slightly Irritating
Serious Eye Damage/Eye Irritation			
Eye	Rabbit		Mildly Irritating
Respiratory or Skin Sensitization			
Skin	Guinea Pig		Sensitizing
Mutagenicity			
No data available			
Carcinogenicity			
IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.			
ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.			
NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.			

SECTION 12 Ecological Information		
Aquatic Ecotoxicity	Bioaccumulative potential	No data available
No data available		
Biodegradability		
No data available		
Mobility in soil		
No data available		

SECTION 13 Disposal Considerations
Waste Disposal
When a decision is made to discard this material as supplied, it does not meet RCRA’s characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

SECTION 14 Transport Information
DOT (US)
Not regulated by DOT
IMDG
Not regulated by IMDG
IATA
Not regulated by IATA

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Irritant, Skin Sensitizer, Eye Irritant, Respiratory Irritant, Digestive Tract Irritant

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	1	1

SARA TITLE III: Section 311/312 Hazard Class

Hexamethylene diisocyanate	CERCLA/SARA RQ 100 lbs
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SARA TITLE III: Section 313 (40CFR370)

Hexamethylene diisocyanate	CERCLA/SARA RQ 100 lbs
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CERCLA Information (40CFR302.4)

This material contains Hexamethylene diisocyanate and releases in excess of CERCLA thresholds are reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. LSP Performance Resins assumes no responsibility for personal injury or property damage to vendees, such vendees or users assume all risks associated with the use of the material.

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek 200C B Clear Coat	Chemtrec
GENERIC NAME: Poly Resin	24 Hour Emergency Number 1-800-424-9300
	Information Number: 1- 920-803-1700
DISTRIBUTOR: LSP Performance Resins 124 Speer Road Chestertown, MD 21620	
Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act	

SECTION 2 Hazards Identification

Emergency Overview			
OSHA Hazardous Skin, Eye and Respiratory Irritant, Skin Sensitizer Target Organs: Eyes, Skin, Digestive Tract, Respiratory Tract			
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Reproductive Toxicity Reproductive Effects : Not Available Teratogenic Effects: No evidence of mutagenetic effects		
GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS			
Health		Environmental	Physical
Acute Toxicity Skin Irritant Eye Irritation Skin Sensitizer STOT (Respiratory)	Category 5 Category 2 Category 2A Category 1 Category 3	Acute Aquatic Hazard	Category 3

Pictogram:



Hazard Statements	Precautionary Statements
H315 May be harmful if swallowed H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May Cause respiratory irritation H402 Harmful to aquatic life	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray. P264 Wash thoroughly after handling. P280 Wear protective gloves/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of containers in accordance with local/regional/national/international requirements.

SKIN May cause irritation with symptoms of reddening and itching. Repeated exposure may cause allergic skin reaction with symptoms of reddening, itching swelling, and rash. May cause sensitization of susceptible persons.

INGESTION Ingestion is not a typical route of industrial exposure. May cause irritation. Symptoms include abdominal pain, nausea, vomiting and diarrhea.

INHALATION

Inhalation is unlikely due to low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation. Wear appropriate respiration equipment if vapor or mist is expected. Symptoms of irritation may include coughing, mucous production and shortness of breath. This product contains talc which is currently listed by OSHA as a respirable dust hazard with an exposure limits of 2 mg/m³.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease. Exposure to dusts may aggravate breathing problems, colds and congestion.

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
Aspartic Ester (s)	Proprietary	50 - 70 %
Aliphatic Carboxylic Ester	623-91-6	1 - 5%
Propylene Carbonate	50862-75-4	1 - 5%
Aldimine	54914-37-3	1 - 5%

SECTION 4 First Aid Measures

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 20-30 minutes. Retract eyelids often. Get prompt medical attention. Symptoms of exposure may include pain or burning sensation, redness, swelling, tearing/discharge or blurred vision.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

Symptoms may include irritation with reddening and itching. Repeated exposure may cause allergic skin reaction and sensitization of susceptible persons.

Ingestion: If large quantity is swallowed, give lukewarm water (2 cups) if victim is completely conscious/alert. Do not induce vomiting as risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

Inhalation: Inhalation is unlikely due to low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation. If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Advise to physicians: If exposed, treat skin and eye burns or irritation conventionally after decontamination. This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

At higher temperatures vapors can cause pressure build up in sealed containers. Use water to cool containers exposed to fire.

Suitable extinguishing media

Dry Chemical, CO₂, Foam, Water spray/water fog for cooling.

Hazardous Decomposition Products

Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NO_x) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling. Notify authorities if liquid enters sewer/public waters.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Extinguish all ignition sources and ventilate area. Wear protective equipment during clean up. Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean up. For spills on water, contain, minimize dispersion and collect. Dispose/report per regulatory requirements. Evacuate and keep unnecessary people out of the spill area. See Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage

Keep container closed when not in use. Store in a dry place away from excessive heat. The material can be stored safely at ambient temperatures. Minimum storage temperature 32 F (0 C) Maximum storage temperature 104 F (40 C). Material is hygroscopic and may absorb small amounts of atmospheric moisture.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
Aspartic Ester (s)	NE	NE	NE	
Aliphatic Carboxylic Ester	NE	NE	NE	
Propylene Carbonate	NE	NE	NE	
Aldimine	NE	NE	NE	

Engineering Controls

Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

Respiratory Protections

No respiratory protection is recommended for working with this material. However if conditions such as in a spray application create a high vapor or mist concentration, use of a NIOSH/MSHA organic vapor/particulate approved respirator or supplied air is recommended.

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Viscous Liquid
Color	Clear to light straw
pH	Not available
Melting/Freezing Temperature	< -20 C (<4 F)
Boiling Point	185C/365F @ 1.0133mbar)
Flash Point	> 93.3 C/200 F
Ignition Temperature	Not available
Autoignition Temperature	N/AP
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.000014 mm Hg
Vapor Density (air=1)	>1
Specific Gravity (water=1 @39.2F)	AP 1.22 at 25 C/77F
Evaporation Rate (Bac=1)	None
Odor	Mild amine odor
Odor threshold	Not available

SECTION 10 Stability and Reactivity

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid extreme heat.

Materials to Avoid

Avoid contact with oxidizing agents.

Hazardous Decomposition Products

Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NOx) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

SECTION 11 Toxicological Information

<p>Toxicity Data Based on DESMOPHEN NH 1520</p> <p>Acute Toxicity Oral LD50 Rat > 200 mg/kg Dermal LD50 Rat > 2,000 mg/kg Inhalation LC50 Rat > 4,224 mg/m³</p> <p>Skin Corrosion/Irritation Skin Rabbit Moderate skin Irritant</p> <p>Serious Eye Damage/Eye Irritation Eye Rabbit Non-irritating</p> <p>Respiratory or Skin Sensitization Dermal Guinea Pig Sensitizer</p> <p>Mutagenicity Genetic Toxicity in Vitro: Ames test: negative (Salmonella typhimurium)</p> <p>Toxicity Data Based on Aliphatic Carboxylic Ester</p> <p>Acute Toxicity Oral LD50 Rat 1,780 mg/kg</p>	<p>Toxicity Data Based on Aspartic Ester</p> <p>Acute Toxicity Oral LD50 Rat > 2,000 mg/kg Dermal LD50 Rat > 2,000 mg/kg Inhalation LC50 Rat 4,224 mg/m³</p> <p>Skin Corrosion/Irritation Skin Rabbit Moderate skin Irritant</p> <p>Serious Eye Damage/Eye Irritation Eye Rabbit Non-irritating</p> <p>Respiratory or Skin Sensitization Dermal Guinea Pig Sensitizer</p> <p>Mutagenicity Genetic Toxicity in Vitro: Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)</p> <p>Carcinogenicity IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH. NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.</p>
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SECTION 12 Ecological Information

Aquatic Ecotoxicity Desmophen NH1520	
Toxicity to fish	LC50 Brachydanio rerio (Zebra fish) 66 mg/l – 96 h
Toxicity to aquatic invertebrates	EC50 Daphnia magna (water flea) 88.6 mg/l – 48 h
Toxicity to algae	EC50 Scenedemus subspicatus (Green Algae) 113 mg/l – 72 h
Toxicity to bacteria	EC50 3,000 mg/l
Biodegradability	
13% Not readily biodegradable. Aerobic exposure time 28 d	
Bioaccumulative potential	
No data available	
Mobility in soil	
No data available	

SECTION 13 Disposal Considerations

Waste Disposal

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

SECTION 14 Transport Information

DOT (US)

Not regulated by DOT

IMDG

Not regulated by IMDG

IATA

Not regulated by IATA

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin, Eye and Respiratory Irritant, Skin Sensitizer

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	0	0

SARA TITLE III: Section 311/312 Hazard Class

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. LSP Performance Resins assumes no responsibility for personal injury or property damage to vendees, such vendees or users assume all risks associated with the use of the material.

MATERIAL SAFETY DATA SHEET

Flakes/Chips

1. PRODUCT and COMPANY INFORMATION

Product Name: Chips/Flakes
Manufacturer: CHIPS UNLIMITED, INC.
Address: 1824 East 6th Street
Tempe, Arizona 85281 U.S.A.
Telephone: 877-502-4477 • 480-968-1550
Internet: www.chipsunlimited.com

MADE IN THE U.S.A.

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>Concentrate</u>
Polyvinyl Acetate	CAS#9003-20-7	12 - 22%
Barium Sulfate (Material is stable – Hazardous polymerization will not occur.)	CAS#7727-43-7	65 - 85%
Talc	CAS#14807-96-6	2 - 10%
Potassium TriPolyPhosphate	CAS#13845-36-8	<.15%
Titanium Dioxide (Not used in black, dark blue, dark green or dark brown colors.)	CAS#13463-67-7	1 - 10%
Carbon Black (Black Chips Only)		± .5%

Additionally, Carbon Black CAS#1333-86-4 and various Copper Compounds are used to achieve other final color. When used, only a trace (± .1%) remains.

3. HAZARDS IDENTIFICATION (Hazard Material Identification System)

Effects of Overexposure

Health – 0; Flammability – 1 (Minimal); Reactivity – 0; Personal Protection – E (Dust Resp).

Inhalation: The dust may cause respiratory irritation with coughing and shortness of breath. The chips/dust are not likely to be hazardous to the skin.

Eye Contact: The dust may be irritating to the eye.

4. FIRST AID MEASURES

Emergency and First Aid Procedures

Inhalation: Remove affected party/parties to an area with plenty of fresh air. If effects persist call a physician.

Eye and Skin Contact: Flush affected area with plenty of water for about 10 to 15 minutes. Wash affected skin area with soap and water.

5. FIRE FIGHTING MEASURES

Fire and explosive properties: This product is not known to present any fire hazard.

6. ACCIDENTAL RELEASE MEASURES

Sweep up and/or shovel or use vacuum to clean up spillage. Deposit into covered container for disposal. All material should then be disposed of in accordance with pertinent Federal, State and Local regulations.

7. HANDLING AND STORAGE

Handling: Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.

Storage: Store in a dry area. Keep containers closed and protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use mechanical ventilation (dilution and local exhaust) to control exposure.

Eye Protection: Safety glasses with side shields.

Skin and Body Protection: Use suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential.

Hand Protection: Impervious gloves.

Respiratory Protection: In case of exposure to high levels of airborne dust, wear a respirator in compliance with national legislation.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure: This product does not present any particular risk for the environment. Refer to applicable national, state and local regulations prior to washing in drain.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A

Vapor Pressure: Not Volatile

Vapor Density: Not Volatile

Specific Gravity (H₂O = 1): 1.1 – 1.2

Evaporation Rate (Butyl Acetate=1): Not Volatile

Appearance: Various colored flakes with color depending upon specific tints used in formula.

10. STABILITY AND REACTIVITY

Conditions contributing to instability: Product is stable but will react violently with sulfuric acid or alkali materials such as sodium.

Incompatibility: Not available/None known.

Conditions contributing to hazardous polymerization: None.

11. TOXICOLOGICAL INFORMATION

Chronic Toxicity: This product is not listed as a carcinogen by the IARC, NTP or OSHA.

No specific testing for irritation has been done.

12. ECOLOGICAL INFORMATION

No ecological testing has been done on this product.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local State and National regulations.

14. TRANSPORTATION INFORMATION

Not Regulated – Ship as Class 60.

15. REGULATORY INFORMATION

U.S. Toxic Substances Control Act: Compliant with regulations.

Sara Title III Section 312; Section 313: Not hazardous.

California Proposition 65: No ingredients known to be present that causes cancer, birth defects or reproductive hazards.

Canadian Domestic Substances List: All components in this product are on the Canadian Domestic Substances List or are exempt from listing.

16. OTHER INFORMATION

User's responsibility/disclaimer of liability: *As the conditions or methods of use are beyond our control, Chips Unlimited, Inc. does not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state and local laws and local regulations remains the responsibility of the user.*

Date Prepared: July 1990

Date Revised: March 2001, November 2001, September 2002, June 2005, November 2005

Date Reviewed: March 2009

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek® Standard Hardener, SH101
GENERIC NAME: Epoxy Hardener

DISTRIBUTOR: LSP Performance Resins
 124 Speer Road
 Chestertown, MD 21620

Chemtrec
 24 Hour Emergency Number 1-800-424-9300
 Information Number: 1-800-666-6216

Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview OSHA Hazardous Target Organ Effect: Skin Sensitizer, Irritant Target Organs: Respiratory, eyes, Skin Physical Appearance: Viscous liquid Immediate Concerns: Skin Irritation		Potential Health Effects Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure. Inhalation and Ingestion: Irritation to system
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Reproductive Toxicity Reproductive Effects : Not Available Teratogenic Effects: Not Available	Signs and Symptoms of Overexposure: Irritation of Skin Medical Conditions Aggravated: Allergy, Skin Disorders

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Acute Toxicity, Oral	Category 5	Not Classified	Not Classified
Skin Irritant	Category 2		
Serious Eye Damage	Category 1		
Skin Sensitization	Category 1		

Pictogram:



Signal Word Danger

Hazard Statements		Precautionary Statements
H303	Maybe harmful if swallowed	P280 Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H318	Causes serious eye damage	

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
polyoxalkyleneamine	9046100	
Triethylene glycol diamine	929599	
Epoxy curing agent	mixture	
Alkyl phenol	84852153	
Alpha hydroxyl toluene	100-51-6	

SECTION 4 First Aid Measures

EYE CONTACT: Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

SKIN CONTACT: Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

INHALATION: Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway

INGESTION: Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Advice to physicians: Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

Not flammable or combustible

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions – Carbon Oxides

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for Safe Handling Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
polyoxalkyleneamine	NE	NE	NE	NE
Triethylene glycol diamine	NE	NE	NE	NE
Epoxy curing agent	NE	NE	NE	NE
Alkyl phenol	NE	NE	NE	NE
Alpha hydroxyl toluene	NE	NE	NE	NE

ENGINEERING CONTROLS Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

PERSONAL PROTECTIVE EQUIPMENT Use a properly fitted, air-purifying or air supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

EYE PROTECTION Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

SKIN AND BODY PROTECTION When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

OTHER HYGENIC PRACTICES Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Liquid
Color	Colorless to Amber
pH	Not available
Melting/Freezing Temperature	40 C/ 104 F
Boiling Point	336 C/ 637 F
Flash Point	> 95 C/ 200 F
Ignition Temperature	Not available
Autoignition Temperature	Not available
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	<0.1 mm Hg
Vapor Density (air=1)	Not available
Specific Gravity (water=1 @39.2F)	1.14 at 25 C/77F
Evaporation Rate (Bac=1)	None
Odor	Light possible phenol
Odor threshold	Not available

SECTION 10 Stability and Reactivity

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

No data available

Conditions to Avoid

Avoid strong acids, bases in bulk and elevated temperatures

Materials to Avoid

Reactive or incompatible with: acids, oxidizers, amines

Hazardous Decomposition Products

Decomposition products formed under fire conditions may include: Carbon oxides, Nitrogen oxides, Aldehydes.

SECTION 11 Toxicological Information

Acute Toxicity

Oral LD50	Rat > 4000 mg/kg.
Dermal LD50	Rabbit 20,000 mg/kg
Inhalation LC50	No data available

Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Skin Corrosion/Irritation

Skin	Irritant
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ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH

Serious Eye Damage/Eye Irritation

Eye	Irritant
Eyes	Rabbit
Severe eye irritation – 24 H	

NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

Respiratory or Skin Sensitization

May cause skin or respiratory sensitization

Mutagenicity

Mouse	Skin
Carcinogenic by RTECS Criteria	
liver, ovarian, thyroid	

SECTION 12 Ecological Information

Aquatic Ecotoxicity

No data available

Biodegradability

Persistent	Not readily biodegradable
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Mobility in soil

No data available

SECTION 13 Disposal Considerations

Waste Disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

DOT (US)

Not Regulated

IMDG

Not Regulated

TDG

Not Regulated

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Sensitizer	Irritant
Corrosive Material	

HMIS Classification

Health Hazard;	3
Flammability	1
Physical Hazards	0

NFPA Rating

3
0
0

SARA TITLE III: Section 311/312 Hazard Class

Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. LSP Performance Resins assumes no responsibility for personal injury or property damage to vendees, such as vendees or users assume all risks associated with the use of the material.

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek® Standard Resin, SR101 Chemtrec
GENERIC NAME: Epoxy Resin 24 Hour Emergency Number 1-800-424-9300
Information Number: 1-800-666-6216
DISTRIBUTOR: LSP Performance Resins
 124 Speer Road
 Chestertown, MD 21620
 Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview OSHA Hazardous Target Organ Effect: Skin Sensitizer, Irritant Target Organs: Respiratory, eyes, Skin Physical Appearance: Viscous liquid Immediate Concerns: Skin Irritation		Potential Health Effects Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure. Inhalation and Ingestion: Irritation to system
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Reproductive Toxicity Reproductive Effects : Not Available Teratogenic Effects: Not Available	Signs and Symptoms of Overexposure: Irritation of Skin Medical Conditions Aggravated: Allergy, Skin Disorders

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Acute Toxicity, Oral	Category 5	Not Classified	Not Classified
Skin Irritant	Category 2		
Serious Eye Damage	Category 1		
Skin Sensitization	Category 1		

Pictogram:



Signal Word Danger

Hazard Statements		Precautionary Statements
H303	Maybe harmful if swallowed	P280 Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H318	Causes serious eye damage	

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
diglycidyl ether bisphenol A epoxy resin	25085-99-8	
Aliphatic epoxide	68609-97-2	
Alkylated phenol	AN123581	
2-methyl-2,4-pentanediol	107-41-5	
Alkyl phenol	84852153	

SECTION 4 First Aid Measures

EYE CONTACT: Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

SKIN CONTACT: Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

INHALATION: Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway

INGESTION: Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Advise to physicians: Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

Not flammable or combustible

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions – Carbon Oxides

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not

reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
diglycidyl ether bisphenol A epoxy resin	NE	NE	NE	NE
Aliphatic epoxide	NE	NE	NE	NE
Alkylated phenol	NE	NE	NE	NE
2-methyl-2,4-pentenediol	25 ppm	NE	25 ppm	NE
Alkyl phenol	NE	NE	NE	NE

ENGINEERING CONTROLS Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

PERSONAL PROTECTIVE EQUIPMENT Use a properly fitted, air-purifying or air supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

EYE PROTECTION Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

SKIN AND BODY PROTECTION When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

OTHER HYGENIC PRACTICES Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Liquid
Color	Colorless to Amber
pH	Not available
Melting/Freezing Temperature	40 C/ 104 F
Boiling Point	336 C/ 637 F
Flash Point	> 95 C/ 200 F
Ignition Temperature	Not available
Autoignition Temperature	Not available
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	<0.1 mm Hg
Vapor Density (air=1)	Not available
Specific Gravity (water=1 @39.2F)	1.14 at 25 C/77F
Evaporation Rate (Bac=1)	None
Odor	Light possible phenol
Odor threshold	Not available

SECTION 10 Stability and Reactivity

Chemical Stability
 Stable under recommended storage conditions

Possibility of Hazardous Reactions
 No data available

Conditions to Avoid
 Avoid strong acids, bases in bulk and elevated temperatures

Materials to Avoid
 Reactive or incompatible with: acids, oxidizers, amines

Hazardous Decomposition Products
 Decomposition products formed under fire conditions may include: Carbon oxides, Nitrogen oxides, Aldehydes.

SECTION 11 Toxicological Information

<p>Acute Toxicity</p> <table border="0"> <tr> <td>Oral LD50</td> <td>Rat > 4000 mg/kg.</td> </tr> <tr> <td>Dermal LD50</td> <td>Rabbit 20,000 mg/kg</td> </tr> <tr> <td>Inhalation LC50</td> <td>No data available</td> </tr> </table> <p>Skin Corrosion/Irritation</p> <table border="0"> <tr> <td>Skin</td> <td>Irritant</td> </tr> </table> <p>Serious Eye Damage/Eye Irritation</p> <table border="0"> <tr> <td>Eye</td> <td>Irritant</td> </tr> <tr> <td>Eyes</td> <td>Rabbit</td> </tr> <tr> <td colspan="2">Severe eye irritation – 24 H</td> </tr> </table> <p>Respiratory or Skin Sensitization May cause skin or respiratory sensitization</p> <p>Mutagenicity</p> <table border="0"> <tr> <td>Mouse</td> <td>Skin</td> </tr> <tr> <td colspan="2">Carcinogenic by RTECS Criteria</td> </tr> <tr> <td colspan="2">liver, ovarian, thyroid</td> </tr> </table>	Oral LD50	Rat > 4000 mg/kg.	Dermal LD50	Rabbit 20,000 mg/kg	Inhalation LC50	No data available	Skin	Irritant	Eye	Irritant	Eyes	Rabbit	Severe eye irritation – 24 H		Mouse	Skin	Carcinogenic by RTECS Criteria		liver, ovarian, thyroid		<p>Carcinogenicity</p> <p>IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC</p> <p>ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH</p> <p>NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP</p>
Oral LD50	Rat > 4000 mg/kg.																				
Dermal LD50	Rabbit 20,000 mg/kg																				
Inhalation LC50	No data available																				
Skin	Irritant																				
Eye	Irritant																				
Eyes	Rabbit																				
Severe eye irritation – 24 H																					
Mouse	Skin																				
Carcinogenic by RTECS Criteria																					
liver, ovarian, thyroid																					

SECTION 12 Ecological Information

Aquatic Ecotoxicity
 No data available

Biodegradability
 Persistent Not readily biodegradable

Mobility in soil
 No data available

SECTION 13 Disposal Considerations

Waste Disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

DOT (US)

Not Regulated

IMDG

Not Regulated

TDG

Not Regulated

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Sensitizer Irritant
Corrosive Material

HMIS Classification

Health Hazard;	2		2
Flammability	1		0
Physical Hazards	0		0

NFPA Rating

SARA TITLE III: Section 311/312 Hazard Class

Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek® Topcoat Resin TRP354 (all colors) Chemtrec
GENERIC NAME: Pigmented Epoxy Resin 24 Hour Emergency Number 1-800-424-9300
Information Number: 1-800-666-6216

DISTRIBUTOR: LSP Performance Resins
 124 Speer Road
 Chestertown, MD 21620

Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview OSHA Hazardous Target Organ Effect: Skin Sensitizer, Irritant Target Organs: Respiratory, eyes, Skin Physical Appearance: Viscous liquid Immediate Concerns: Skin Irritation	Potential Health Effects Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure. Inhalation and Ingestion: Irritation to system
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Reproductive Toxicity Reproductive Effects : Not Available Teratogenic Effects: Not Available
Signs and Symptoms of Overexposure: Irritation of Skin Medical Conditions Aggravated: Allergy, Skin Disorders	

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health	Environmental	Physical
Acute Toxicity, Oral Skin Irritant Serious Eye Damage Skin Sensitization	Category 5 Category 2 Category 1 Category 1	Not Classified

Pictogram:



Signal Word Danger

Hazard Statements	Precautionary Statements
H303 May be harmful if swallowed	P280 Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
H315 Causes skin irritation	
H317 May cause an allergic skin reaction	
H318 Causes serious eye damage	

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
Diglycidyl ether bisphenol A epoxy resin	25085-99-8	
Aliphatic epoxide	Mixture	
Salt of unsat'd amides and acidic esters	Mixture	
Barium sulfate	7727-43-7	5-10
Alpha hydroxide toluene	100-51-6	
Methyl n-amyl ketone	110-43-0	0-2

SECTION 4 First Aid Measures

EYE CONTACT: Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

SKIN CONTACT: Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 10 minutes. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

INHALATION: Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway

INGESTION: Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Advice to physicians: Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

Not flammable or combustible

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions – Carbon Oxides

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for Safe Handling Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
Diglycidyl ether bisphenol A epoxy resin	NE	NE	NE	NE
Aliphatic epoxide	NE	NE	NE	NE
Salt of unsat'd amides and acidic esters	NE	NE	NE	NE
Barium sulfate	10 mg/m3	NE	10 mg/m3	NE
Alpha hydroxide toluene	NE	NE	NE	NE
Methyl n-amyl ketone	NE	NE	NE	NE

ENGINEERING CONTROLS Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

PERSONAL PROTECTIVE EQUIPMENT Use a properly fitted, air-purifying or air supplied respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards or the product and the safe working limits of the selected respirator.

EYE PROTECTION Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

SKIN AND BODY PROTECTION When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

OTHER HYGENIC PRACTICES Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Viscous Liquid
Color	various
pH	Not available
Melting/Freezing Temperature	N/A
Boiling Point	N/A
Flash Point	>200 F
Ignition Temperature	Not available
Autoignition Temperature	Not available
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	Not available
Vapor Density (air=1)	Not available
Specific Gravity (water=1 @39.2F)	1.4
Evaporation Rate (Bac=1)	None
Odor	Mild, sweet
Odor threshold	Not available

SECTION 10 Stability and Reactivity

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

No data available

Conditions to Avoid

Avoid strong acids, bases in bulk and elevated temperatures

Materials to Avoid

Reactive or incompatible with: acids, oxidizers, amines

Hazardous Decomposition Products

Decomposition products formed under fire conditions may include: Carbon oxides, Nitrogen oxides, Aldehydes.

SECTION 11 Toxicological Information

Acute Toxicity

Oral LD50	Rat > 4000 mg/kg.
Dermal LD50	Rabbit 20,000 mg/kg
Inhalation LC50	No data available

Carcinogenicity

IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Skin Corrosion/Irritation

Skin	Irritant
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ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH

Serious Eye Damage/Eye Irritation

Eye	Irritant
Eyes	Rabbit
Severe eye irritation – 24 H	

NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

Respiratory or Skin Sensitization

May cause skin or respiratory sensitization

Mutagenicity

Mouse	Skin
Carcinogenic by RTECS Criteria	
liver, ovarian, thyroid	

SECTION 12 Ecological Information

Aquatic Ecotoxicity

No data available

Biodegradability

Persistent	Not readily biodegradable
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Mobility in soil

No data available

SECTION 13 Disposal Considerations

Waste Disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

DOT (US)

Not Regulated

IMDG

Not Regulated

TDG

Not Regulated

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Sensitizer Irritant
Corrosive Material

HMIS Classification

Health Hazard;	1	NFPA Rating	1
Flammability	1		0
Physical Hazards	0		0

SARA TITLE III: Section 311/312 Hazard Class

Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: Section 313 (40CFR370)

Barium sulfate is listed in SARA III, part 372, section 313

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or results to be obtained from the user thereof. LSP Performance Resins assumes no responsibility for personal injury or property damage to vendees, such as vendees or users assume all risks associated with the use of the material.

LSP PERFORMANCE RESINS
800.638.9874

124 Speer Road
FAX 410.778.3625

Chestertown, MD 21620
web www.lspinc.com

SECTION 1 Product and Company Information

PRODUCT NAME: SeamTek® UV13 Clear surface Coat Chemtrec
GENERIC NAME: Vinyl ester resin 24 Hour Emergency Number 1-800-424-9300
Information Number: 1-800-666-6216
DISTRIBUTOR: LSP Performance Resins
 124 Speer Road
 Chestertown, MD 21620
 Comments: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA 29 CFR1910.1200, 91/155/ECC and Canadian Hazardous Products Act

SECTION 2 Hazards Identification

Emergency Overview – no known huma or animal health effects dada – these are expectations OSHA Hazardous Target Organ Effect: Skin Sensitizer, Irritant Target Organs: Respiratory, eyes, Skin Physical Appearance: Viscous liquid Immediate Concerns: Skin Irritation		Potential Health Effects Skin: Will cause irritation and dermatitis, repeated overexposure will cause dermatitis and sensitization. Sensitized persons may experience rapid irritation of skin upon exposure. Inhalation and Ingestion: Irritation to system
Carcinogenicity: Not listed by NTP Not Listed by IARC Not Listed by OSHA	Reproductive Toxicity Reproductive Effects : Not Available Teratogenic Effects: Not Available	Signs and Symptoms of Overexposure: Irritation of Skin, Medical Conditions Aggravated: Allergy, Skin Disorders

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Acute Toxicity, Oral	Category 5	Not Classified	Not Classified
Skin Irritant	Category 2		
Serious Eye Damage	Category 1		
Skin Sensitization	Category 1		

Pictogram:



Signal Word Danger

Hazard Statements		Precautionary Statements
H303	Maybe harmful if swallowed	P280 Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H318	Causes serious eye damage	

SECTION 3 Composition / Information on Ingredients

Chemical Name	CAS	Wt%
Unsaturated Vinyl ester Resin	See Index	Ap 25-85
Monomer(s)	See index	Ap 15-75

SECTION 4 First Aid Measures

EYE CONTACT: Get medical attention immediately. Immediately flush eyes gently with large amounts of water, holding lids open for at least 20-30 minutes, retracting eyelids often. Check for, and remove contact lenses.

SKIN CONTACT: Get medical attention immediately. Flush contaminated skin with plenty of WATER. Do NOT wash with solvents. Wash contaminated clothing thoroughly with water before removing it or wear gloves. Continue to rinse for at least 15 minutes. If sticky, use waterless cleaner first. May cause irritation and allergic reaction. Seek medical advice if irritation develops or persists.

INHALATION: Move exposed person to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate make of self contained breathing apparatus. Keep person warm and at rest. If not breathing or breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing air to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. **PROMT ACTION IS ESSENTIAL**

INGESTION: If large quantity swallowed, give lukewarm water (pint) if victim is conscious. Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting as risk of damage to lungs exceeds poisoning risk. Never give anything by mouth to an unconscious person.

Advice to physicians: Symptomatic and supportive therapy as needed. May aggravate skin conditions.

SECTION 5 Fire Fighting Measures

Conditions of Flammability

High temperature, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerization reaction, generating heat/pressure. Closed containers may rupture or explode during runaway polymerization.

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions – Carbon Oxides

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling.

SECTION 6 Accidental Release Measures

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Place in container for disposal according to local regulations via a licensed waste disposal contractor. Contaminated absorbent materials may pose the same hazards as the spilled product. See section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for Safe Handling Can cause skin and eye irritation and allergic skin reaction.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear

appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Avoid exposure to sources of UV light. Store out of direct sunlight. Check inhibitor content often, adding to bulk liquid if needed. Do not blanket or mix with oxygen free gas as it renders inhibitor ineffective. Do not store below 32F – inhibitor can separate as a solid. If frozen, warm and remix material gently (<90F) . Prevent moisture contact. Keep container tightly closed and sealed until ready for use. Use only non sparking tools. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Hazardous Component	PEL	STEL	TLV	Other
	NE	NE	NE	NE
	NE	NE	NE	NE
	NE	NE	NE	NE
	NE	NE	NE	NE
	NE	NE	NE	NE

ENGINEERING CONTROLS Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

PERSONAL PROTECTIVE EQUIPMENT A properly fitted, NIOSH/MSA approved respiratory protection equipment is recommended. Respirator selection must be based on known or anticipated exposure levels, the hazards or the product and the safe working limits of the selected respirator.

EYE PROTECTION Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

SKIN AND BODY PROTECTION When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene or rubber. Use of barrier cream is recommended. Clean equipment thoroughly after each use. Discard contaminated leather shoes and canvas sneakers.

OTHER HYGENIC PRACTICES Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 9 Physical and Chemical Properties

Appearance	
Form	Viscous Liquid
Color	Straw to light yellow
pH	Not available
Melting/Freezing Temperature	Na
Boiling Point	Na
Flash Point	> 95 C/ 200 F
Ignition Temperature	Not available
Autoignition Temperature	Not available
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	Na

Material Safety Data Sheet		UV13
Effective Date: 01/05/11	Previous Revision date: 00/00/0000	Date Printed: 6/13/2014

Vapor Density (air=1)	Not available
Specific Gravity (water=1 @39.2F)	AP 1.20 @25C/77C
Evaporation Rate (Bac=1)	N/DA
Odor	Mild to sweet acrylic
Odor threshold	Not available

SECTION 10 Stability and Reactivity	
Chemical Stability Stable under recommended storage conditions	
Possibility of Hazardous Reactions No data available	
Conditions to Avoid High temperatures, localized heat sources (ie) drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, UV radiation, inert gas blanketing,	
Materials to Avoid Reactive or incompatible with: acids, strong oxidizers, strong reducers, free radical initiators, inert gas, oxygen scavengers	
Hazardous Decomposition Products Decomposition products formed under fire conditions may include: Carbon oxides, acrid smoke fumes, other toxic vapors.	

SECTION 11 Toxicological Information	
Acute Toxicity Oral LD50 . Dermal LD50 Inhalation LC50 No data available Skin Corrosion/Irritation Skin Irritant Serious Eye Damage/Eye Irritation Eye Irritant Eyes Rabbit Respiratory or Skin Sensitization May cause skin or respiratory sensitization Mutagenicity	Carcinogenicity IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC ACGIH: No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH NTP: No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

SECTION 12 Ecological Information	
Aquatic Ecotoxicity No data available	
Biodegradability Persistent Not readily biodegradable	
Mobility in soil No data available	

SECTION 13 Disposal Considerations

Waste Disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

DOT (US)

Not Regulated

IMDG

Not Regulated

TDG

Not Regulated

SECTION 15 Regulatory Information

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Sensitizer	Irritant
Corrosive Material	

HMIS Classification

Health Hazard;	2		
Flammability	1	0	
Physical Hazards	2	0	

NFPA Rating

SARA TITLE III: Section 311/312 Hazard Class

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

SECTION 16 Other Information

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).