

1. Identification

Product Identification

Product Identifier: **CSS V-Wrap™ 770 Component A**
Recommended Use: CSS V-Wrap™ 770 is an epoxy primer and saturant for use with the CSS V-Wrap™ fabrics and other CSS V-Wrap™ products.
Use Restrictions: To ensure proper installation use according to package directions. Complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

Company Identification

Company: Simpson Strong-Tie Company Inc.
Address: 5956 W. Las Positas Blvd.
 Pleasanton, CA 94588
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada)
 1-352-323-3500 (International)

For most current SDS, please visit our website at www.strongtie.com/sds

2. Hazard Identification

General Information

CSS V-Wrap™ 770 is a high-strength, high-modulus epoxy resin system to prime and saturate the CSS V-Wrap™ fabrics and other CSS V-Wrap™ products. It is a two-component system. The two parts of the system have been assessed individually according to the Globally Harmonized System (GHS). The mixed product can be assumed to carry the hazards of each component until the product has been fully cured. The final cured produce will uniformly clear to pale amber in color and can be considered nonhazardous. This Safety Data Sheet covers hazards and responses for the safe use and handling of Component A. See the Component B Safety Data Sheet for complete product information.

Component A GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards:	Not Classified.		
Health Hazards:	Skin Corrosion/Irritation	Category 2	H315: Causes skin irritation
	Serious Eye Damage/Irritation	Category 2	H319: Causes serious eye irritation
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
Environmental Hazards:	Chronic Aquatic Hazard	Category 2	H411: Toxic to aquatic life with long lasting effects.

Main Symptoms: Irritation of eyes and skin. Symptoms include redness, itching, burning, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin.

GHS Label Elements



Contains: Bisphenol-A Based Epoxy Resin
Signal Word: **WARNING!**
Hazard Statements:
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H317: May cause an allergic skin reaction.
 H411: Toxic to aquatic life with long lasting effects.
Precautionary Statements:
Prevention:
 P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P261: Avoid breathing dust, mist or vapor.
 P264: Wash thoroughly after handling.
 P271: Use only outdoor or in a well-ventilated area.

Response:	P272:	Contaminated clothing should not be allowed out of the workplace.
	P273:	Avoid release to the environment.
	P280:	Wear protective gloves/protective clothing/eye protection/face protection.
	P302+P352:	IF ON SKIN: Wash with plenty of water.
	P333+P313:	If skin irritation or rash occurs: Get medical advice/attention.
Storage:	P362+P364:	Take off contaminated clothing and wash before reuse.
	P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313:	If eye irritation persists: Get medical advice/attention.
Disposal:	P391:	Collect spillage.
	P404+P233:	Store in a well-ventilated place. Keep container tightly closed.
	P405:	Store locked up.
	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None.

Hazards Not Otherwise Classified (HNOC)

None known.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for Component A are listed below. See the Component B Safety Data Sheet for the rest of the ingredients. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:

Classification: Globally Harmonized System Classifications

The full text for H- phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

Composition – All concentrations are in percent by weight unless otherwise indicated.

Chemical Name	Weight %	CAS Number	EC Number
Bisphenol-A Based Epoxy Resin	> 70	25068-38-6	500-033-5
Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411			

4. First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Routes of Exposure

Eye Contact:	Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician immediately.
Skin Contact:	Remove contaminated clothing and product, immediately wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation persists consult a physician.
Ingestion:	Rinse mouth immediately. Do not induce vomiting unless told to do so by a poison control center or doctor. If vomiting occurs keep head low so that stomach contents don't get into the lungs. Never give anything by mouth to an unconscious person. Consult a physician immediately.
Inhalation:	If breathing is difficult remove patient to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

Most Important Symptoms

Irritation of eyes and skin. Symptoms include redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Extinguish with foam, carbon dioxide, dry powder, or water fog.
Additional Information:	Do not use water jet as an extinguisher as this will spread the fire.
Hazards during Fire-Fighting:	Hazardous decomposition products may occur when materials polymerize at temperatures above 500° F (260°C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-

Fire-Fighting Procedures:

off from fire-fighting to enter drains or water courses. Use standard firefighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal Precautions

Non-emergency personnel: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Emergency personnel: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

Clean-Up Methods

Small spills (uncured): Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination. Do NOT use solvents to clean adhesives from skin. Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied.

Large spills (uncured): Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water.

Cured Material: Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust. Take precautionary measures; do not allow dust to build up.

Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling

Mechanical ventilation or local exhaust ventilation is recommended. Keep away from open flames, hot surfaces and sources of ignition. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Do not inhale dust, mist, or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Pregnant women should not work with this product if there is risk of exposure. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. To obtain optimal performance from Simpson Strong-Tie products and to achieve maximum allowable design load, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie.

Storage

Store in a closed container away from incompatible materials (see Section 10). Keep in original container. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Keep away from heat and sources of ignition. Store in a well-ventilated place. Protect against physical damage. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: Wear appropriate personal protective equipment.

Eye Protection: Wear chemical splash goggles or safety glasses with side shield. Face shield is recommended where splashing is probable.

Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, or butyl rubber.

Skin and Body Protection: Avoid contact with skin, wear long sleeve shirt/long pants and other clothing as required to minimize skin contact.

Respirator Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, or if discomfort is experienced, an approved respirator should be worn.

General Hygiene: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Engineering Controls

Mechanical ventilation or local exhaust ventilation is recommended, ventilation rates should be matched to conditions to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and emergency shower.

Exposure Limits

No exposure limits noted for ingredients.

9. Physical and Chemical Properties

Physical State:	Liquid
Form:	Liquid
Color:	Clear
Odor:	Sweet
Odor Threshold:	N/E
pH:	N/E
Flammability limit – lower %:	N/E
Flammability limit – upper %:	N/E
Vapor Pressure:	N/E
Vapor Density:	N/E
Solubility:	N/E
Freezing/Melting Point:	N/E
Boiling Point:	N/E
Flash Point:	>484°F (251°C)
Evaporation Rate:	N/E
Decomposition Temperature:	N/E
Specific Gravity:	1.16 kg/L (9.68 lbs/gal)
VOC (after cure A+B):	0%
Viscosity:	N/E

10. Stability and Reactivity

Reactivity:	This product is stable and non-reactive under normal conditions.
Chemical Stability:	Stable under normal storage conditions.
Condition to Avoid:	High heat and open flame.
Substances to Avoid:	Oxidizing agents, acids, organic bases, and amines.
Hazardous Reactions:	Hazardous polymerization does not occur.
Decomposition Products:	Carbon dioxide, carbon monoxide, oxides of nitrogen, and other organic compounds.
Other Hazards:	CSS V-Wrap™ 770 is a reactive system and will release considerable heat during cure if allowed to puddle or accumulate.

11. Toxicological Information

Likely Routes of Exposure

Ingestion:	Expected to be a low ingestion hazard.
Inhalation:	Prolonged exposure may cause temporary respiratory irritation.
Skin contact:	Skin irritation. May cause sensitization by skin contact.
Eye contact:	Causes serious eye irritation.
Symptoms:	Redness, itching, burning, tearing, swelling, and blurred vision; shortness of breath, discomfort in chest, or coughing. Rash/dermatitis.

Information on Toxicological Effects

Acute Effects

Toxicity: Not expected to be acutely toxic.

Component	Estimate
CSS V-Wrap™ 770 Component A	
Acute, Oral, LD50	> 5000 mg/kg
Acute, Dermal, LD50	> 2000 mg/kg

CSS V-Wrap™ 770

SAFETY DATA SHEET



Skin corrosion/irritation: Causes skin irritation.
Eye damage/eye irritation: Causes serious eye irritation.
Respiratory sensitization: Not a respiratory sensitizer.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: Not expected to be an aspiration hazard.
Specific target organ toxicity: Single exposure No data available.

Chronic Effects

Germ cell mutagenicity: No data available.
Carcinogenicity: This product is not a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity: No data available.
Specific target organ toxicity: Repeated exposure No data available.

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with certain pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on data on the components and the ecotoxicology of similar products. CSS V-Wrap™ 770 Component A is classified as toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
Bisphenol-A Based Epoxy Resin (CAS 25068-38-6)		
Aquatic, Fish, LC50	Salmo gairdneri	1.3 mg/l, 96 hours
Aquatic, Crustacea, EC50	Daphnia magna	2.1 mg/l, 48 hours
Aquatic, Algae, EC50	Algae	> 11 mg/l, 72 hours

Persistence and degradability: No data available.
Bioaccumulative potential: No data available for this product.
Mobility in soil: No data available.

Further Information

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Consideration

Waste Disposal of Substance: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.
Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Disposal of Cured Product: Chip or grind off surface. Solid material does not need special disposal consideration.

14. Transportation Information

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A-Epichlorohydrin Resin), 9, III, Marine Pollutant
Transportation Class: 9
Packing Group: III
Environmental Hazard: Yes
Required Labels: 9
ERG Code (IATA): 9L

CSS V-Wrap™ 770
SAFETY DATA SHEET



EmS (IMDG): F-A, S-F
 Special Precautions for Users: Read safety instructions, SDS and emergency procedures before handling.

CSS V-Wrap™ 770 Component A is not regulated for ground transportation by the USDOT. Check limited quantity regulations prior to shipping; smaller volumes may qualify for LQ shipping exemptions.

15. Regulatory Information

United States

Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.
 US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.
 CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories:				
Immediate	Delayed	Fire	Pressure	Reactivity
Yes	No	No	No	No

SARA 302 Extremely hazardous substance: No
 SARA 311/312 Hazardous chemical: Yes
 SARA 313 (TRI reporting): Not regulated.

US. California Proposition 65:

WARNING: This product can expose you to chemicals which are known to the State of California to cause cancer, reproductive harm, or other birth defects. For more information, go to www.P65Warnings.ca.gov.

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Bisphenol-A (CAS 80-05-7)	Trace	---	---	---	CA65 (Reproductive)
IARC: 1- Carcinogenic 2- Possibly carcinogenic 3 – Not classifiable as to carcinogenicity 4 – Probably not carcinogenic NTP: Known to be human carcinogen or Reasonably anticipated to be a human carcinogen ACGIH – A1 – Confirmed carcinogen A2 – Suspected carcinogen A3 – Animal carcinogen A4 – Not classified A5 – Not suspected CA65 – California Prop 65					

Canada

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

International

The product is classified in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

This product is not subject to or not applicable for any of the following International Regulations; **Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.**

International Inventories

Australia	All components of this product are listed on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	All components of this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
Japan	All components of this product are listed on the Inventory of Existing and New Chemical Substances (ENCS).

CSS V-Wrap™ 770

SAFETY DATA SHEET



Korea	All components of this product are included on the Existing Chemicals List (ECL).
New Zealand	All components of this product are included on the New Zealand Inventory.
Philippines	All components in this product are listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).
United States	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.

16. Other Information

Date Prepared or Revised: December 2022
Supersedes: New
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR:	Hazardous Product Regulations (Canada)
DOT:	Department of Transportation (U.S.)
EPA:	Environmental Protection Agency (U.S.)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
HEPA:	High-Efficiency Particulate Air
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods code
NIOSH:	National Institute of Occupational Safety and Health (U.S.)
NFPA:	National Fire Protection Association (US)
NTP:	National Toxicology Program (US)
OSHA:	Occupational Safety and Health Administration (U.S.)
PEL:	Permissible Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act (U.S. EPA)
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
STOT:	Specific Target Organ Toxicity (GHS Classification)
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (U.S.)
TWA:	Time Weighted Average (exposure for 8-hour workday)
VOC:	Volatile Organic Compounds
WHMIS:	Canadian Workplace Hazardous Materials Information System

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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Internal

FOR INTERNAL USE ONLY

A Component CSS V-Wrap™ 770
XCOM3B

1. Identification

Product Identification

Product Identifier: **CSS V-Wrap™ 770 Component B**
Recommended Use: CSS V-Wrap™ 770 is an epoxy primer and saturant for use with the CSS V-Wrap™ fabrics and other CSS V-Wrap™ products.
Use Restrictions: To ensure proper installation use according to package directions. Complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

Company Identification

Company: Simpson Strong-Tie Company Inc.
Address: 5956 W. Las Positas Blvd.
 Pleasanton, CA 94588
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada)
 1-352-323-3500 (International)

For most current SDS, please visit our website at www.strongtie.com/sds

2. Hazard Identification

General Information

CSS V-Wrap™ 770 is a high-strength, high-modulus epoxy resin system to prime and saturate the CSS V-Wrap™ fabrics and other CSS V-Wrap™ products. It is a two-component system. The two parts of the system have been assessed individually according to the Globally Harmonized System (GHS). The mixed product can be assumed to carry the hazards of each component until the product has been fully cured. The final cured produce will uniformly clear to pale amber in color and can be considered nonhazardous. This Safety Data Sheet covers hazards and responses for the safe use and handling of Component B. See the Component A Safety Data Sheet for complete product information.

Component B GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards:	Not Classified.		
Health Hazards:	Acute Toxicity, Oral	Category 4	H302: Harmful if swallowed
	Skin Corrosion/Irritation	Category 1	H314: Causes severe skin burns
	Serious Eye Damage/Irritation	Category 1	H318: Causes serious eye damage
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
Environmental Hazards:	Not classified.		
Main Symptoms:	Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. Long term exposure may cause chronic effects.		

GHS Label Elements



Contains:	Amines	
Signal Word:	DANGER!	
Hazard Statements:	H302:	Harmful if swallowed.
	H314:	Causes severe skin burns and eye damage.
	H318:	Causes serious eye damage.
	H317:	May cause an allergic skin reaction.
Precautionary Statements:		
Prevention:	P201:	Obtain special instructions before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P260:	Do not breathe mist or vapor.
	P264:	Wash thoroughly after handling.
	P272:	Contaminated clothing should not be allowed out of the workplace.

Response:	P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352: IF ON SKIN: Wash with plenty of water. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash before reuse. 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.
Storage:	P337+P313: If eye irritation persists: Get medical advice/attention. P404+P233: Store in a well-ventilated place. Keep container tightly closed.
Disposal:	P405: Store locked up. P501: Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None.

Hazards Not Otherwise Classified (HNOC)

None known.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for Component B are listed below. See the Component A Safety Data Sheet for the rest of the ingredients. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:

Classification: Globally Harmonized System Classifications

The full text for H- phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

Composition – All concentrations are in percent by weight unless otherwise indicated.

Chemical Name	Weight %	CAS Number	EC Number
Polyoxypropylenediamine	> 80	9046-10-0	695-873-3
Classifications: Skin Corr. 1B: H314, Eye Corr. 1: H318, Aquatic 3: H402+H412			

4. First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Routes of Exposure

Eye Contact:	Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician immediately.
Skin Contact:	Remove contaminated clothing and product, immediately wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation persists consult a physician.
Ingestion:	Rinse mouth immediately. Do not induce vomiting unless told to do so by a poison control center or doctor. If vomiting occurs keep head low so that stomach contents don't get into the lungs. Never give anything by mouth to an unconscious person. Consult a physician immediately.
Inhalation:	If breathing is difficult remove patient to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

Most Important Symptoms

Corrosive effects. Symptoms include itching, burning, redness, swelling, and blurred vision. May cause temporary blindness and severe eye damage.

5. Fire-Fighting Measures

Suitable Extinguishing Media:	Extinguish with foam, carbon dioxide, dry powder, or water fog.
Additional Information:	None known.

Hazards during Fire-Fighting:

Hazardous decomposition products may occur when materials polymerize at temperatures above 500° F (260°C). Irritating and toxic gases/fumes may be released during a fire. Hazardous gases/vapors produced are carbon monoxide, carbon dioxide, oxides of nitrogen, cyanide, aldehydes, and miscellaneous hydrocarbons.

Fire-Fighting Procedures:

Use standard firefighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal Precautions

Non-emergency personnel: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Emergency personnel: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

Clean-Up Methods

Small spills (uncured):

Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination. Do NOT use solvents to clean adhesives from skin. Take appropriate precautions when handling flammable solvents. Solvents may damage surfaces to which they are applied.

Large spills (uncured):

Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water.

Cured Material:

Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust. Take precautionary measures; do not allow dust to build up.

Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling

Mechanical ventilation or local exhaust ventilation is recommended. Keep away from open flames, hot surfaces and sources of ignition. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Do not inhale dust, mist, or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Pregnant women should not work with this product if there is risk of exposure. Wash thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. To obtain optimal performance from Simpson Strong-Tie products and to achieve maximum allowable design load, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie.

Storage

Store in a closed container away from incompatible materials (see Section 10). Keep in original container. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Keep away from heat and sources of ignition. Protect container from physical damage. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure:

Wear appropriate personal protective equipment.

Eye Protection:

Chemical splash goggles or safety glasses with side shield.

Hand Protection:

Wear chemical-resistant gloves such as: Nitrile, neoprene, or butyl rubber.

Skin and Body Protection:

Wear long sleeve shirt/long pants and other clothing as required to minimize skin contact.

Respirator Protection:

The use of a respirator is not required during normal use of this product. An approved respirator should be worn whenever workplace conditions warrant respirator use.

General Hygiene:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

Engineering Controls

Mechanical ventilation or local exhaust ventilation is recommended, ventilation rates should be matched to conditions to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and emergency shower.

Exposure Limits

No exposure limits noted for ingredients.

9. Physical and Chemical Properties

Physical State:	Liquid
Color:	Clear
Form:	Liquid
Odor:	Ammoniacal
Odor Threshold:	N/E
pH:	N/E
Flammability limit – lower %:	N/E
Flammability limit – upper %:	N/E
Vapor Pressure:	N/E
Vapor Density:	N/E
Solubility:	Slight (<10%)
Freezing/Melting Point:	N/E
Boiling Point:	N/E
Flash Point:	> 200°F
Evaporation Rate:	N/E
Decomposition Temperature:	N/E
Specific Gravity:	7.9 lbs/gal (0.95 kg/L)
VOC (after cure A+B):	0%
Viscosity:	N/E

10. Stability and Reactivity

Reactivity:	This product is stable and non-reactive under normal conditions.
Chemical Stability:	Stable under normal storage conditions.
Condition to Avoid:	High heat and open flame.
Substances to Avoid:	May react vigorously with oxidizing agents and acids.
Hazardous Reactions:	Hazardous polymerization will not occur.
Decomposition Products:	Ammonia when heated. Carbon dioxide, carbon monoxide, oxides of nitrogen and other organic compounds in a fire. Combustion under oxygen-starved conditions may produce nitriles, cyanic acid, isocyanates, cyanogens, nitrosamines, amides and carbamates.
Other Hazards:	CSS V-Wrap™ 770 is a reactive system and will release considerable heat during cure if allowed to puddle or accumulate.

11. Toxicological Information

Likely Routes of Exposure

Ingestion:	Causes digestive tract burns.
Inhalation:	May cause respiratory irritation.
Skin contact:	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact:	Causes serious eye damage.

Information on Toxicological Effects

Acute Effects

Toxicity: Harmful if swallowed.

Component	Estimate
CSS V-Wrap™ 770 Component B Toxicity Estimate	
Acute, Oral, LD50	3000 mg/kg
Acute, Dermal, LD50	2800 mg/kg

Skin corrosion/irritation: Causes severe skin burns.

CSS V-Wrap™ 770

SAFETY DATA SHEET



Eye damage/eye irritation: Causes serious eye damage.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: No data available.
Specific target organ toxicity: Single exposure No data available.

Chronic Effects

Germ cell mutagenicity: No data available.
Carcinogenicity: This product is not considered a carcinogen by IARC, NTP, ACGIH, or OSHA.
Reproductive toxicity: No data available.
Specific target organ toxicity: Repeated exposure No data available.

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on the data on the components and the ecotoxicology of similar products. CSS V-Wrap™ 770 Component B is not environmentally classified. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
Polyoxypropylenediamine (CAS 9046-10-0)	NOEC Algae	0.32 mg/l, 72 hours

Persistence and degradability: No data available.
Bioaccumulative potential: No data available for this product.
Mobility in soil: No data available.

Further Information

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Consideration

Waste Disposal of Substance: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.
Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transportation Information

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or nation regulations.

UN number: UN2735
UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.
(Polyoxypropylenediamine), 8, II
Transportation Class: 8
Packing Group: II
Environment Hazard: Yes
Required Labels: 8
ERG Code (IATA): 8L
EmS (IMDG): F-A, S-B
Special Precautions for Users: Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory Information

United States

Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4) : Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard Categories:				
Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	No	No

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting): Not regulated.

California Proposition 65:

WARNING: This product can expose you to chemicals which are known to the State of California to cause cancer, reproductive harm, or other birth defects. For more information, go to www.P65Warnings.ca.gov.

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Propylene Oxide	Trace	2B	ANTICIPATED	A3	CA65 (Carcinogenic)
IARC: 1- Carcinogenic 2- Possibly carcinogenic 3 – Not classifiable as to carcinogenicity 4 – Probably not carcinogenic NTP: Known to be human carcinogen or Reasonably anticipated to be a human carcinogen ACGIH – A1 – Confirmed carcinogen A2 – Suspected carcinogen A3 – Animal carcinogen A4 – Not classified A5 – Not suspected CA65 – California Prop 65					

Canada

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

International

The product is classified in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

This product is not subject to or not applicable for any of the following International Regulations; **Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.**

International Inventories

Australia	All component of this product are listed on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	One or more components of this product are not included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are not exempt from listing.
Japan	One or more components in this product are not listed on the Inventory of Existing and New Chemical Substances (ENCS).
Korea	One or more components of this product are not included on the Existing Chemicals List (ECL).
New Zealand	All components of this product are listed on the New Zealand Inventory.
Philippines	All components in this product are listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).
United States	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.

16. Other Information

Date Prepared or Revised: December 2022
Supersedes: New
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com

Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS No.: Chemical Abstract Service Registry Number
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR: Hazardous Product Regulations (Canada)
DOT: Department of Transportation (U.S.)
EPA: Environmental Protection Agency (U.S.)
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
HEPA: High-Efficiency Particulate Air
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods code
NIOSH: National Institute of Occupational Safety and Health (U.S.)
NFPA: National Fire Protection Association (US)
NTP: National Toxicology Program (US)
OSHA: Occupational Safety and Health Administration (U.S.)
PEL: Permissible Exposure Limit
SARA: Superfund Amendments and Reauthorization Act (U.S. EPA)
STEL: Short Term Exposure Limit (15 minute Time Weighted Average)
STOT: Specific Target Organ Toxicity (GHS Classification)
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act (U.S.)
TWA: Time Weighted Average (exposure for 8-hour workday)
VOC: Volatile Organic Compounds
WHMIS: Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H412: Harmful to aquatic life with long lasting effects.

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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Internal

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CSS V-Wrap™ 770 Component B:
XCOM3B
XCORR