

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

1. Identification

Product Identification

Product Identifier: CSS-ES Component A
Recommended Use: CSS-ES is an epoxy primer and saturant for use with the Simpson Strong-Tie® Composite Strengthening System fabrics.
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-ES Epoxy Primer and Saturant is a high-strength, high-modulus epoxy resin system to prime and saturate the CSS fabrics. It is a two-component (2A:1B) 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, Phenolic Novolac 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:
P102: Keep out of reach of children.
P103: Read label before use.
P202: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust, mist, or vapors.
P264: Wash thoroughly after handling.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

Response:	P271:	Use only outdoors or in a well-ventilated area.
	P272:	Contaminated work clothing should not be allowed out of the workplace.
	P273:	Avoid release to 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.
	P362+P364:	Take off contaminated clothing and wash before re-use.
	P304+P340:	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313:	If eye irritation persists: Get medical advice/attention.
Storage:	P308+P313:	If exposed or concerned: Get medical advice/attention.
	P391:	Collect spillage.
	P403:	Store in a well-ventilated place.
	P405:	Store locked up.
Disposal:	P411:	Store between 45-90°F (7-32°C).
	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)

None known.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:

Classification: Global Harmonized System Classifications

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

Chemical Name	Weight %	CAS Number	EC Number
Bisphenol-A Based Epoxy Resin	75-90	25068-38-6	500-033-5
Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411			
Phenolic Novolac Resin	10-25	28064-14-4	608-164-0
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. Never give anything by mouth to an unconscious person. Consult a physician.
Inhalation:	Remove patient to fresh air. 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, burning, tearing, swelling, and blurred vision. Rash/dermatitis.

5. Fire-Fighting Measures

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

SIMPSON

Strong-Tie

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. Water run-off can cause environmental damage. Do not allow run-off from fire-fighting to enter drains or water courses.
Fire-Fighting Procedures:	Use standard fire-fighting 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 by 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 away from incompatible materials (See Section 10 of the SDS). Keep in original container. Keep container tightly closed. Store in a dry, well-ventilated place out of direct sunlight between 45-90°F (7-32°C). Keep away from heat and sources of ignition. Protect container from physical damage. Keep out of 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, butyl.
Skin and Body Protection:	Wear long sleeve shirt/long pants and other clothing as required to minimize contact.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

SIMPSON**Strong-Tie****Respirator Protection:**

If engineering controls do 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	Freezing/Melting Point:	N/E
Form:	Liquid	Boiling Point:	N/E
Color:	Clear	Flash Point:	>212°F (>100°C)
Odor:	Sweet	Evaporation Rate:	N/E
Odor Threshold:	N/E	Specific Gravity:	1.17 kg/L (9.76 lbs/gal)
pH:	N/E	VOC (A+B):	3 g/L
Flammability	N/E	U/L Flammability:	N/E
Vapor Pressure:	N/E	Vapor Density:	N/E
Solubility:	N/E	Kow:	N/E
Decomposition:	N/E	Viscosity:	10,400 cP

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-ES 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:	Causes skin irritation. May cause an allergic skin reaction or sensitization by skin contact.
Eye contact:	Causes serious eye irritation.
Symptoms:	Redness, itching, burning, tearing, swelling, and blurred vision. Rash/dermatitis. Shortness of breath, discomfort in chest, or coughing.

Information on Toxicological Effects**Acute Effects**

Toxicity:	Not expected to be acutely toxic.
------------------	-----------------------------------

Product	Estimate
CSS-ES Component A Toxicity Estimate	
Acute, Oral, LD50	> 5000 mg/kg
Acute, Dermal, LD50	> 2000 mg/kg

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.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

SIMPSON**Strong-Tie**

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, 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 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-ES Component A is classified as toxic to aquatic life with long lasting effects.

Supporting Data

Component	Estimate
CSS-ES Component A Estimate	
Aquatic Acute, Fish, LC50	1-5 mg/l, 96 hours
Aquatic Acute, Crustacea, EC50	1-5 mg/l, 48 hours
Aquatic Acute, Algae, EC50	>10 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

CSS-ES Component A is not regulated for ground transportation by the USDOT. Outside of the US, check limited quantity regulations prior to shipping; smaller volumes may qualify for LQ shipping exemptions.

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

Environment Hazard: Yes

Required Labels: 9

ERG Code (IATA): 9L

EmS (IMDG): F-A, S-F

Additional Information

Special Precautions for Users: Read safety instructions, SDS and emergency procedures before handling.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

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.

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
Component A	Yes	No	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.

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 components of this product are included 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 included on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	All components of this product are included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are not exempt from listing.
Japan	All components of this product are included on the Inventory of Existing and New Chemical Substances (ENCS).
Korea	All components of this product are 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 & Puerto Rico	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

16. Other Information

Date Prepared or Revised: March 2022
Supersedes: October 2019
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.)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
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 Company Inc. 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.

© 2022 Simpson Strong-Tie Company Inc.

Internal

FOR INTERNAL USE ONLY

CSS-ES Component A:
XCOM3B

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

1. Identification

Product Identification

Product Identifier: CSS-ES Component B
Recommended Use: CSS-ES is an epoxy primer and saturant for use with the Simpson Strong-Tie® Composite Strengthening System fabrics.
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-ES Epoxy Primer and Saturant is a high-strength, high-modulus epoxy resin system to prime and saturate the CSS fabrics. It is a two-component (2A:1B) 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.

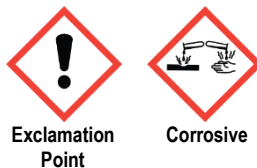
Component B GHS Classification

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 and eye damage.
	Serious Eye Damage/Irritation	Category 1	H318: Causes serious eye damage
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
Environmental Hazards:	Acute Aquatic Hazard	Category 3	H402: Harmful to aquatic life
	Chronic Aquatic Hazard	Category 3	H412: Harmful to aquatic life with long lasting effects

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 to the gastrointestinal tract and respiratory system.

GHS Label Elements



Contains: Amines, Phenols
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.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

Prevention:	P102:	Keep out of reach of children.
	P103:	Read label before use.
	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 vapors.
	P264:	Wash thoroughly after handling.
	P271:	Use only outdoors or in a well-ventilated area.
	P272:	Contaminated work clothing should not be allowed out of the workplace.
	P273:	Avoid release to environment.
	P280:	Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P301+P330+P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P312:	Call a POISON CENTER/doctor if you feel unwell.
	P303+P361+P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P333+P313:	If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364:	Take off contaminated clothing and wash before re-use.
	P304+P340:	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313:	If eye irritation persists: Get medical advice/attention.
	P308+P313:	If exposed or concerned: Call a poison center/doctor.
	P391:	Collect spillage.
Storage:	P403+P233:	Store in a well-ventilated place. Keep container tightly closed.
	P405:	Store locked up.
Disposal:	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)

CSS-ES Component B contains a chemical which can be harmful when inhaled as mist. Due to the nature of this product, the likelihood of this route of exposure is highly unlikely. Simpson Strong-Tie chooses to warn consumers of this potential risk to ensure safe use of the product. If deemed necessary, the use of an approved respirator can be used to control exposure.



Health Hazard: Acute Toxicity, Inhalation Category 4

Hazard Statement: Harmful if inhaled.

Exclamation Point

Precautionary Statement: Do not breathe dust or mist.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

List of abbreviations and symbols:

Classification: Global Harmonized System Classifications

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

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

Chemical Name	Weight %	CAS Number	EC Number
Polyoxypropylenediamine Classifications: Skin Corr. 1: H314, Eye Corr. 1: H318, Aquatic 3: H402+H412	40-60	9046-10-0	695-873-3
Benzyl Alcohol Classifications: Acute Tox. 4:H302+H332	10-30	100-51-6	202-859-8
Polymeric Cycloaliphatic Amines Classifications: Acute Tox. 4:H302, Skin Corr. 1: H314, Skin Sens. 1 : H317	10-30	135108-88-2	603-894-6
2,4,6-tris-(dimethylaminomethyl)phenol	1-15	90-72-2	202-013-9

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

SIMPSON
Strong-Tie

Classifications: Acute Tox. 4:H302, Skin Irrit. 2: H315, Eye Irrit. 2: H319

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. Never give anything by mouth to an unconscious person. **Consult a physician.**

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, **consult a physician.**

Most Important Symptoms

Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal and respiratory system.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Water fog, carbon dioxide, dry chemical powder, aqueous foam.

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 produced at high temperature. Hazardous gases/vapors produced are carbon monoxide, carbon dioxide, oxides of nitrogen, cyanide, aldehydes, and miscellaneous hydrocarbons. Water run-off can cause environmental damage. Do not allow run-off from fire-fighting to enter drains or water courses.

Fire-Fighting Procedures: Use standard fire-fighting 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 by 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. Prevent entry into waterways, sewer, basements or confined areas.

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.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

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 taste or swallow. Avoid prolonged exposure. Do not inhale dust, mist, or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. Wash contaminated clothing before reuse. Avoid contact during pregnancy/while nursing. 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 away from incompatible materials (See Section 10 of the SDS). Keep in original container. Keep container tightly closed. Store in a dry, well-ventilated place out of direct sunlight between 45-90°F (7-32°C). Keep away from heat and sources of ignition. Protect container from physical damage. Keep out of 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, butyl.
Skin and Body Protection:	Wear long sleeve shirt/long pants and other clothing as required to minimize contact.
Respirator Protection:	If engineering controls do 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

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH Pocket Guide
Benzyl Alcohol (CAS 100-51-6)	5 mg/m ³ (TWA)	N/E	5 mg/m ³ (STEL) 10 ppm

9. Physical and Chemical Properties

Physical State:	Liquid	Freezing/Melting Point:	N/E
Form:	Liquid	Boiling Point:	>290°F (>143°C)
Color:	Amber	Flash Point:	230°F (110°C) Open Cup
Odor:	Ammoniacal	Evaporation Rate:	N/E
Odor Threshold:	N/E	Specific Gravity:	0.97 kg/L (8.09 lbs/gal)
pH:	N/E	VOC (A+B):	3 g/L
Flammability	N/E	U/L Flammability:	N/E
Vapor Pressure:	N/E	Vapor Density:	N/E
Solubility:	Slight (<10%)	Kow:	N/E
Decomposition:	N/E	Viscosity:	80 cP

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.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET

SIMPSON**Strong-Tie****Hazardous Reactions:**
Decomposition Products:

Hazardous polymerization does not occur.
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-ES 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: Harmful if swallowed. Corrosive material; can cause burns to respiratory tract and gastrointestinal tract if swallowed.

Inhalation: May cause irritation to the respiratory system.

Skin contact: Causes skin burns. May cause an allergic skin reaction or sensitization by skin contact.

Eye contact: Causes serious eye damage.

Symptoms: Burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal tract

Information on Toxicological Effects

Acute Effects

Toxicity: Harmful if swallowed. Harmful if inhaled as dust or mist.

Product	Estimate
CSS-ES Component B Toxicity Estimate	
Acute, Oral, LD50	1000-1500 mg/kg
Acute, Dermal, LD50	> 2000 mg/kg
Acute, Inhalation, LC50	<5 mg/kg

Skin corrosion/irritation: Causes severe skin burns.

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, 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 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-ES Component B is classified as harmful to aquatic life with long lasting effects.

Supporting Data

Component	Estimate
CSS-ES Component B Estimate	
Aquatic Acute, Fish, LC50	400-500 mg/l, 96 hours
Aquatic Acute, Crustacea, EC50	50-100 mg/l, 48 hours
Aquatic Acute, Algae, EC50	500-800 mg/l, 72 hours

Persistence and degradability: No data available.

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET



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

Check limited quantity regulations prior to shipping; smaller volumes may qualify for LQ shipping exemptions.

UN number: UN2735
UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine), 8, III, Marine Pollutant
Transportation Class: 8
Packing Group: III
Environment Hazard: Yes
Required Labels: 8
ERG Code (IATA): 8L
EmS (IMDG): F-A, S-B

Additional Information

Special Precautions for Users: Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

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.

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
Component B	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.

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 components of this product are included on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	One or more components of this product are not included on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	All components of this product are included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are not exempt from listing.
Japan	One or more components of this product are not included 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 & Puerto Rico	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: March 2022

Supersedes: October 2019

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.)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
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

CSS-ES Epoxy Primer and Saturant

SAFETY DATA SHEET



WHMIS: Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Company Inc. 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.

© 2022 Simpson Strong-Tie Company Inc.

Internal

FOR INTERNAL USE ONLY

CSS-ES Component B:
XCOM3B
XCORR