

1. Identification

Product Identification

Product Identifier: ET-HP® Cartridges
Recommended Use: ET-HP® is a two-component, high-solids, epoxy-based system for use as a high-strength, non-shrink anchor-grouting material.
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

ET-HP® Epoxy Adhesive is a high-solids, epoxy-based anchor-grout for anchoring threaded rod and rebar into concrete (cracked/uncracked) and masonry. It is a two component (1:1) system packaged as a single unit in a dual cartridge. The two parts of this product have been individually assessed according to the Globally Harmonized System (GHS). Exposure to the individual components will only occur with improper use. The resin and hardener are dispensed and mixed simultaneously through the mixing nozzle. The mixed product can be assumed to carry the hazards of each component until the product has fully hardened. The final cured product will be gray and can be considered nonhazardous. Some hazards may apply upon grinding or cutting through hardened product. This Safety Data Sheet covers the hazards and responses for the safe use of this product.

Resin (White Side) 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
	Germ Cell Mutagenicity	Category 2	H341: Suspected of causing genetic defects
	Carcinogenicity	Category 2	H351: Suspected of causing cancer
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. Long term exposure may cause chronic effects.

GHS Label Elements



Contains: Epoxy Resins, Ground Limestone, Titanium Dioxide
Signal Word: **WARNING!**
Hazard Statements:
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H317: May cause an allergic skin reaction.
 H341: Suspected of causing genetic defects.
 H351: Suspected of causing cancer.
 H411: Toxic to aquatic life with long-lasting effects.

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Precautionary Statements:

Prevention:	P102:	Keep out of reach of children.
	P103:	Read label before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P233:	Keep container tightly closed.
	P261:	Avoid breathing mist or vapor.
	P264:	Wash thoroughly after handling.
	P271:	Use only outdoors or in a well-ventilated area.
	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.
Response:	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.
	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: Get medical advice/attention.
	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.

Hardener (Black Side) GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards:	Not Classified.		
Health Hazards:	Acute Toxicity, Oral	Category 4	H302: Harmful if swallowed
	Acute Toxicity, Dermal	Category 5	H313: May be harmful in contact with skin
	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
	Germ Cell Mutagenicity	Category 2	H341: Suspected of causing genetic defects
	Reproductive Toxicity	Category 2	H361: Suspected of damaging fertility or the unborn child
	STOT, Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged and repeated exposure
Environmental Hazards:	Acute Aquatic Hazard	Category 1	H400: Very toxic to aquatic life
	Chronic Aquatic Hazard	Category 1	H410: Very toxic 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 or burns to the gastrointestinal tract and respiratory system. Long term exposure may cause chronic effects.

GHS Label Elements



Contains: Amines, Phenols
Signal Word: **DANGER!**
Hazard Statements: H302: Harmful if swallowed.

	H313:	May be harmful in contact with skin.
	H314:	Causes severe skin burns and eye damage.
	H318:	Causes serious eye damage.
	H317:	May cause an allergic skin reaction.
	H341:	Suspected of causing genetic defects.
	H361:	Suspected of damaging fertility or the unborn child.
	H373:	May cause damage to organs through prolonged and repeated exposure.
	H400:	Very toxic to aquatic life.
	H410:	Very toxic to aquatic life with long-lasting effects.
Precautionary Statements:		
Prevention:	P102:	Keep out of reach of children.
	P103:	Read label before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P260:	Do not breathe dust, mist, or vapor.
	P264:	Wash thoroughly after handling.
	P270:	Do not eat, drink, or smoke when using this product.
	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.
Response:	P301+P330+P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P310:	Immediately call a POISON CENTER/doctor.
	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.
	P363:	Wash contaminated clothing 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.
	P308+P313:	If exposed or concerned: Get medical advice/attention.
	P391:	Collect spillage.
Storage:	P405:	Store locked up.
Disposal:	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None.

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured components of ET- HP. Upon combination of the two components, an innocuous solid which does not present any immediate hazards is formed. Upon grinding or cutting through the cured product, the following hazards may apply. Ensure good work practice and use of personal protective equipment as needed to control exposure to processing dust.



Chronic Health

Health Hazard:	Carcinogenicity	Category 1A
	STOT, Repeated Exposure	Category 1
OSHA Hazard:	Combustible Dust	
Hazard Statement:	May cause cancer.	
	Causes damage to organs through prolonged and repeated exposure.	
	Can form explosive air-dust mixtures, avoid creating dust.	
Precautionary Statement:	Do not breathe dust.	
	Do not allow dust to build up on surfaces.	

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: 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.

ET-HP® Epoxy Adhesive

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Resin (White Side)

Chemical Name	Weight %	CAS Number	EC Number
Bisphenol-A Based Epoxy Resin	40-60	25068-38-6	500-033-5
Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, STOT SE 3: H335, Aquatic Chronic 2: H411			
Phenolic Novolac Resin	20-50	28064-14-4	608-164-0
Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, STOT SE 3: H335			
Ground Limestone	1-10	1317-65-3	215-279-6
Classifications: Skin Irrit. 2: H315			
Titanium Dioxide	1-5	13463-67-7	236-675-5
Classifications: Carc. 2: H351			
Butyl Glycidyl Ether	1-5	2426-08-6	219-376-4
Classifications: Flam. Liq. 3: H226, Acute Tox. 4: H302+H332, Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, GCM 2: H341, Carc. 2: H351, STOT SE 3: H335, Aquatic 3: H402+H412			

Hardener (Black Side)

Chemical Name	Weight %	CAS Number	EC Number
2-Piperazin-1-ylethylamine	5-15	140-31-8	205-411-0
Classifications: Acute Tox. 4: H302+H312, Skin Corr. 1B: H314, Skin Sens. 1: H317, Aquatic 3: H402+H412			
Bisphenol-A	1-10	80-05-7	201-245-8
Classifications: Skin Corr. 1: H314, Eye Corr. 1: H318, Repr. 2: H361, STOT SE 3: H335			
Phenol	1-5	108-95-2	203-632-7
Classifications: Acute Tox. 3: H301+311+331, Skin Corr. 1B: H314, GCM 2: H341, STOT RE 2: H373, Aquatic Chronic 2: H411			
Nonyl Phenol	1-5	84852-15-3	284-325-5
Classifications: Acute Tox. 4: H302, Skin Corr. 1B: H314, Repr. 2: H361, Aquatic 1: H400+H410			
2,4,6-tris-(dimethylaminomethyl)phenol	1-5	90-72-2	202-013-9
Classifications: Acute Tox. 4: H302, Skin Irrit. 2: H315, Eye Irrit. 2: H319			
Benzene-1,3-Dimethaneamine	1-5	1477-55-0	216-032-5
Classifications: Acute Tox. 4: H302+H312+H332, Skin Corr. 1A: H314, Aquatic 3: H402+H412			
Crystalline Silica, Quartz	1-5	14808-60-7	238-878-4
Classifications: Carc. 1A: H350, STOT RE 1: H372			
Benzldimethylamine	1-5	103-83-3	203-149-1
Classifications: Flam. Liq. 3: H226, Acute Tox. 4: H302+H312+H332, Skin Corr. 1: H314, Aquatic 3: H402+H412			
p-tert-butylphenol	< 1	98-54-4	202-679-0
Classifications: Skin Irrit. 2: H315, Eye Corr. 1: H314, Repr. 2: H361, STOT SE 3: H335, Aquatic Chronic 2: 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. Chemical burns must be treated by 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:	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 tract and respiratory system.

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-off from fire-fighting to enter drains or water courses.
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. If desired, approved solvents, such as ketones (MEK, acetone, etc.), lacquer thinner, or adhesive remover can be used. 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. Keep combustibles away from spilled material.
Cured Material:	Chip or grind off surface. The product contains components that are carcinogenic in respirable form. 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 flame, hot surfaces, and sources of ignition. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Do not breathe dust, mist, or vapor. When using, do not eat, drink, or smoke. Use only in well-ventilated places. Wash thoroughly after handling. Wash contaminated clothing before reuse. Pregnant women should not use if there is a chance of exposure. 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

Full Unused Cartridges: 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.

Partially Used Cartridges: To store partially used cartridge temporarily replace cap or leave hardened nozzle in place. To re-use, attach new nozzle. Do not try to dispense after adhesive hardens in nozzle. CAUTION: Adhesive will start to gel in the nozzle. Adhesive will gel faster at higher temperatures. Material under pressure can blowout the back of the cartridge if the adhesive in the nozzle hardens. Use only an appropriate Simpson Strong-Tie® mixing nozzle in accordance with Simpson Strong-Tie instructions. Modification or improper use of mixing nozzle may impair adhesive performance. Keep out of reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Eye Protection: Chemical splash goggles or safety glasses with side shield are recommended.
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: If engineering controls do not maintain airborne concentrations below recommended exposure limits, or if discomfort is experienced, an approved respirator should be worn. Proper installation of ET-HP® requires drilling into concrete or masonry. Concrete and masonry dust can be hazardous to human health and precautions should be taken to avoid inhalation.
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
Butyl Glycidyl Ether (CAS 2426-08-6)	270 mg/m ³ 50 ppm	3 ppm	30 mg/m ³ (ceiling) 5.6 ppm (ceiling)
Titanium Dioxide (CAS 13463-67-7)	5 mg/m ³ (respirable) 15 mg/m ³ (total dust)	10 mg/m ³	N/E
Phenol* (CAS 108-95-2)	19 mg/m ³ 5 ppm	5 ppm	60 mg/m ³ (ceiling) 15.6 ppm (ceiling)
Quartz (CAS 14808-60-7)	$\frac{10}{\%SiO_2 + 2} \text{ mg/m}^3$	0.025 mg/m ³ (respirable)	0.05 mg/m ³ (respirable)
Benzene-1,3-Dimethaneamine* (CAS 1477-55-0)	0.1 mg/m ³ (ceiling)	0.1 mg/m ³ (ceiling)	0.1 mg/m ³ (ceiling)

*Skin Designation: Material can be absorbed through the skin.

9. Physical and Chemical Properties

Property	Resin	Hardener
Physical State:	Liquid, Paste	Liquid, Paste
Color:	White	Black
Odor:	Sweet	Ammonia
pH:	6.9	10.2
Flammability limit – lower %:	No data	No data
Flammability limit – upper %:	No data	No data
Vapor Pressure:	Non-volatile	No data
Vapor Density:	No data	No data
Solubility:	Insoluble in water	Slightly soluble in water
Freezing/Melting Point:	No data	No data
Boiling Point:	> 500 °F (>260 °C)	No data
Flash Point:	250 °F (121 °C) Open Cup	225 °F (107 °C) Open Cup
Evaporation Rate:	No data	No data
Decomposition Temperature:	No data	No data
Specific Gravity:	1.19 at 72°F (22°C)	1.36 at 72°F (22°C)
VOC (after cure):	3 g/L	3 g/L
Kow:	No data	No data
Viscosity:	No data	No data

10. Stability and Reactivity

Reactivity: This product is stable and non-reactive under normal conditions.
Chemical Stability: Stable under normal storage conditions.

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Condition to Avoid: High heat and open flame.
Substances to Avoid: **Resin:** Oxidizing agents, acids, organic bases, and amines. **Hardener:** Strong oxidizing agents, peroxides, phenols, and acids.
Hazardous Reactions: Hazardous polymerization does not occur. The product is stable if stored and handled as prescribed/indicated.
Decomposition Products: Fire or high temperature can create carbon dioxide, carbon monoxide, oxides of nitrogen, and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Harmful if swallowed. Corrosive material; causes severe irritation or burns to the gastrointestinal tract and respiratory tract.
Inhalation: If this material is heated or misted, coughing and mild, irritation may occur. Do not inhale dust from cutting/grinding cured product.
Skin contact: May be harmful in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.
Eye contact: Causes serious eye damage.
Symptoms: Burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. Severe irritation or burns to the gastrointestinal tract and respiratory system. Shortness of breath, discomfort in chest, or coughing.

Information on Toxicological Effects

Acute Effects

Toxicity: Harmful if swallowed. May be harmful in contact with skin.

Chemical	Estimate
ET-HP Resin Toxicity Estimate	
Acute, Oral, LD50	> 8000
Acute, Dermal, LD50	> 2000
ET-HP Hardener Toxicity Estimate	
Acute, Oral, LD50	>2000
Acute, Dermal, LD50	> 2000

Skin corrosion/irritation: Causes serious skin irritation and burns.
Eye damage/eye irritation: Causes serious eye irritation and damage.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Aspiration hazard: Due to the physical form of this product it is not an aspiration hazard.
Specific target organ toxicity Single exposure: May cause respiratory irritation.

Chronic Effects

Germ cell mutagenicity: This product contains components that are suspected of causing genetic defects.
Carcinogenicity: ET Resin contains a component that is suspected of being a carcinogen. The product also contains components which are considered carcinogens only in their respirable form. Due to the nature of this product, exposure to respirable particles is likely only when grinding or cutting cured product. Ensure good work practice and use of personal protective equipment as needed to control exposure.
Reproductive toxicity: Suspected of damaging fertility.
Specific target organ toxicity Repeated exposure May cause damage to organs (kidney, liver, lung, nervous system, skin) through prolonged or repeated exposure.

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Quartz (CAS 14808-60-7)	1-5	1	KNOWN	A2	CA65
Titanium Dioxide (CAS 13463-67-7)	1-5	2B	---	---	CA65

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Bisphenol-A (CAS 80-05-7)	1-10	---	---	---	CA65
Phenol (CAS 108-95-2)	1-5	3	---	A4	in vitro tests show limited mutagenic properties in human cells
Nonyl Phenol (CAS 84852-15-3)	1-5	---	---	---	Limited evidence of reproductive toxicity (NOAEL >2000 ppm)
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					

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 components and the ecotoxicity of similar products. Resin is classified as toxic to aquatic life with long lasting effects. Hardener is classified as very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Estimate
ET-HP® Resin Toxicity Estimate	
Aquatic, Fish, LC50	< 2 mg/l, 96 hours
Aquatic, Crustacea, EC50	2-10 mg/l, 48 hours
Aquatic, Algae, EC50	>10 mg/l, 72 hours
ET-HP® Hardener Toxicity Estimate	
Aquatic, Fish, LC50	>800 mg/l, 96 hours
Aquatic, Crustacea, EC50	20-50 mg/l, 48 hours
Aquatic, Algae, EC50	700-800 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

DOT: ET-HP in cartridges are not regulated for transport.

IMDG / IATA: ET-HP in cartridges are less than 5L, and are **exempt** from EHS classification when shipping by **AIR** (IATA A197) or **WATER** (IMDG Code 2.10.2.7). Please contact Simpson Strong-Tie if you are trying to ship ET-HP in quantities larger than 5L.

Additional Information

Special precautions for user: 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 intended to be transported in bulk.

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):
Nonyl Phenol (CAS 84852-15-3) LISTED

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4):
Phenol (CAS 108-95-2) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA):

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

SARA 302 Extremely hazardous substance:

Component	CAS	Reportable Quant.	Threshold Planning Quant. Lower Value	Threshold Planning Quant. Upper Value
Phenol	108-95-2	1000	500 lbs	10000 lbs

SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting):

Chemical	CAS Number	% In Blend (approx.)
Phenol	108-95-2	1-5
Nonyl Phenol	84852-15-3	1-5
Bisphenol-A	80-05-7	1-10

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
Quartz (CAS 14808-60-7)	< 5	1	KNOWN	A2	CA65 (Carcinogenic)
Titanium Dioxide (CAS 13463-67-7)	1-5	2B	---	---	CA65 (Carcinogenic)
Bisphenol-A (CAS 80-05-7)	1-10	---	---	---	CA65 (Reproductive)
Carbon Black (CAS 1333-86-4)	< 0.1	2B	---	---	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	One or more components in this product are not listed 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 in this product are not 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	One or more components in this product are not listed 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	One or more components in this product are not listed on the New Zealand Inventory.
Philippines	One or more components in this product are not 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: October 2019
Supersedes: August 2016
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)
SDS: Safety Data Sheet
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)
U.S.: United States
VOC: Volatile Organic Compounds
WHMIS: Canadian Workplace Hazardous Materials Information System

ET-HP® Epoxy Adhesive**SAFETY DATA SHEET****Full Text of H – Phrases Under Section 3**

H226:	Flammable liquid and vapor.
H301:	Toxic if swallowed.
H311:	Toxic in contact with skin.
H312:	Harmful in contact with skin.
H331:	Toxic if inhaled.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H350:	May cause cancer.
H402:	Harmful to aquatic life.
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**FOR INTERNAL USE ONLY**

ET-HP Resin:	ET-HP Hardener:
XCOM3B – 50% Cartridge	XCOM3B- 50% Cartridge