S&P Resin 220 HP Component A
SAFETY DATA SHEET

This Safety Data Sheet was prepared following the Code of Practice: Preparation of Safety Data Sheets for Hazardous Chemicals from Work Safe Australia and the New Zealand Code of Practice for the Preparation of Safety Data Sheets (SDS) [No. HSNO CoP 8-1 09-06]. This product has been classified according to the hazard criteria of the Globally Harmonized System (GHS) and contains all of the information required by Safe Work Australia and Work Safe New Zealand.

1. Identification

Product Identification

Product Identifier: **S&P Resin 220 HP Component A**
Recommended Use: S&P Resin 220 HP Component A is the resin of a bi-component system.
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 Australia Pty Limited
Address: 2A/201 Power Street
Glendenning, NSW 2761
Australia
Phone: 1300 787 664
Website: www.strongtie.com.au
Emergency: **13 11 26**

Company: Simpson Strong-Tie New Zealand
Address: 52A Arrenway Drive
Albany, Auckland 0632
New Zealand
Phone: +64 9 477 4440
Website: www.strongtie.co.nz
Emergency: **0800 POISON (0800 764 766)**

2. Hazard Identification

General Information

S&P Resin 220 HP Part A and B is a solvent-free, thixotropic, grey, two-component epoxy resin adhesive that has been specially developed for bonding carbon fibre laminates (S&P C-Laminate). 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.

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

Exclamation Point | Environmental Hazard

Contains: REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN), PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER (BISPHENOL F - EPICHLORHYDRIN RESIN WITH NUMBER AVERADGE MOLECULAR WEIGHT < 700), 1,4-BIS(2,3 EPOXYPROPOXY)BUTANE

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:	Do not handle until all safety precautions have been read and understood.

	P261:	Avoid breathing mist or vapor.
	P264:	Wash thoroughly after handling.
	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.
Storage:	P405:	Store locked up.
Disposal:	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for Component A 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.

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

Chemical Name	Weight %	CAS Number	EC Number
Quartz, (SIO2) – Non Respirable **Classifications:** Carcinogenity 1: H350, STOT RE 1: H372	25-50	14808-60-7	238-878-4
Reaction product: bisphenol-A-(epichlorohydrin) **Classifications:** Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411	10-25	25068-38-6	500-033-5
Phenol, Polymer with Formaldehyde, Glycidyl Ether (Bisphenol F-Epichlorohydrin Resin Average Molecular Weight < 700) **Classifications:** Skin Irrit. 2: H315, Skin Sens. 1: H317, Aquatic Chronic 2: H411	2.5-10	28064-14-4	500-006-8
1,4-Bis(2,3 Epoxypropoxy)Butane **Classifications:** Acute Tox. 4: H312+H332, Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317	2.5-10	2425-79-8	219-371-7

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, burning, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin.

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.
Combustion Products:	In combustion emits toxic fumes.

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. 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. When using, do not eat, drink or smoke. Do not breathe dust, mist or vapor. Use only in well-ventilated places. Avoid contact with eyes, skin, and clothing. 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

Keep away from incompatible materials. Keep in original container. Keep container tightly closed. Store in a dry, well-ventilated place out of direct sunlight. Keep away from heat and sources of ignition. Protect container from physical damage. Avoid freezing temperatures. Keep out of reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure:	Wear appropriate 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.

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
Quartz (CAS 14808-60-7)	$\frac{10}{\%SiO_2 + 2}$ mg/m^3	0.025 mg/m³ (respirable)	0.05 mg/m³ (respirable)

9. Physical and Chemical Properties

Property	
Physical State:	Liquid, Paste
Color:	No data
Odor:	No data
pH:	No data
Flammability limit – lower %:	No data
Flammability limit – upper %:	No data
Vapor Pressure:	No data
Vapor Density:	No data
Solubility:	Insoluble in water
Freezing/Melting Point:	No data
Boiling Point:	No data
Flash Point:	No data
Evaporation Rate:	No data
Decomposition Temperature:	No data
Relative Density:	1.51
VOC:	No data
Viscosity:	No data

10. Stability and Reactivity

Component A

Reactivity: This product is stable and non-reactive under normal conditions of use, storage, and transport.

Chemical Stability: Stable under normal conditions.

Condition to Avoid: Heat and open flame. Contact with incompatible materials.

Substances to Avoid: Strong oxidizing agents. Sodium hydroxide.

Hazardous Reactions: No dangerous reactions known under conditions of normal use.

Decomposition Products: No hazardous decomposition products are known. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Inhalation: Do not inhale dust from cutting/grinding cured product. No adverse effects due to inhalation are expected.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Eye contact: Causes serious eye irritation.

Symptoms: Severe eye irritation. Symptoms may include stinging, pain, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.

Information on Toxicological Effects

Acute Effects

Toxicity: Not considered acutely toxic.

Chemical	Estimate
S&P Resin 220 HP 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: 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: No data available.
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 components and the ecotoxicity of similar products. S&P Resin 220 HP Component A is classified as toxic to aquatic life with long-lasting effects. Avoid release to the environment.

Supporting Data

Component	Estimate
S&P Resin 220 HP Component A Toxicity Estimate	
Aquatic, Fish, LC50	1.5 mg/l, 96 hours
Aquatic, Daphnia magna, EC50	2.7 mg/l, 48 hours
Aquatic, Algae, IC50	> 1.8 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. (Reaction Product: Bisphenol-A-(Epichlorohydrin), Phenol, polymer with formaldehyde, glycidyl ether (bisphenol f - epichlorhydrin resin with number average molecular weight < 700)), 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
Special Precautions for Users:	Ready safety instructions, SDS and emergency procedures before handling.

Based on packaging size, Limited Quantity exemptions may apply. Please consult the 49 CFR HMR, IATA DGR, and IMDG Code to ensure that shipments comply with these regulations.

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

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

Superfund Amendments and Reauthorization Act of 1986 (SARA):

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

SARA 302 Extremely hazardous substance: None.
SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting): None.

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.

European Union

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 of this product have an unknown status 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 have an unknown status on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	One or more components of this product have an unknown status on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
Japan	One or more components of this product have an unknown status on the Inventory of Existing and New Chemical Substances (ENCS).

Korea	One or more components of this product have an unknown status on the Existing Chemicals List (ECL).
New Zealand	One or more components of this product have an unknown status on the New Zealand Inventory. Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
Philippines	One or more components of this product have an unknown status 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: August 2022
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

H312: Harmful in contact with skin.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H350: May cause cancer.
H372: Causes damage to organs through prolonged or repeated exposure.

Disclaimer

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