

1. Identification

Product Identification

Product Identifier: CSS V-Wrap™ FPS Fire Protection System
Recommended Use: CSS V-Wrap FPS Fire Protection System is a specialized fireproofing material.
Use Restrictions: For industrial use only. 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, USA
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada)
 1-352-323-3500 (International)

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

2. Hazard Identification

General Information

CSS V-Wrap™ FPS Fire Protection System is a single component, spray-applied, specialized fireproofing material designed to be used with CSS V-Wrap™ FRP systems to provide up to four hours of fire protection. It is a cementitious-based, non-combustible and non-flammable material. This product has been assessed according to the Globally Harmonized System (GHS). The product can be assumed to carry its hazards until the product has been fully cured. The final hardened material is gray in color and can be considered nonhazardous. Some hazards apply upon grinding or cutting through hardened product. This Safety Data Sheet covers hazards and responses for the safe use and handling of CSS V-Wrap™ FPS.

GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards:	Not Classified.		
Health Hazards:	Acute Toxicity, Oral	Category 4	H302: Harmful if swallowed
	Aspiration Hazard	Category 2	H305: May be harmful if swallowed and enters airways.
	Skin Corrosion/Irritation	Category 1	H314: Causes severe skin burns
	Serious Eye Damage/Irritation	Category 1	H318: Causes serious eye damage
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
	STOT, SE	Category 3	H335: May cause respiratory irritation.
	Carcinogenicity	Category 1	H350: May cause cancer.
	STOT, RE	Category 1	H372: Causes damage to organs through prolonged or repeated exposure.

Environmental Hazards: Not classified.

Main Symptoms: Damage to the eyes and skin. Symptoms include redness, itching, burns, tearing, swelling and blurred vision; discomfort in the chest, shortness of breath, or coughing. May cause rash/ allergic reaction to skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. Inhalation may cause respiratory irritation. Long term exposure may cause chronic effects.

GHS Label Elements



Contains: Vermiculite, Portland Cement, Calcium Sulfate, Calcium Carbonate
Signal Word: **DANGER!**
Hazard Statements: H302: Harmful if swallowed.
 H305: May be harmful if swallowed and enters airways.
 H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.
 H317: May cause an allergic skin reaction.
 H335: May cause respiratory irritation.
 H350: May cause cancer. (inhalation)
 H372: Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation).

Precautionary Statements:

Prevention:

P102: Keep out of reach of children.
 P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P260: Do not breathe mist or vapor.
 P264: Wash hands thoroughly after handling.
 P271: Use only outdoors in a well-ventilated area.
 P272: Contaminated clothing should not be allowed out of the workplace.
 P280: Wear protective gloves/clothing/eye protection/face protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water.
 P332+P313: If skin irritation occurs: Get medical advice/attention.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 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: Get medical advice/attention.
 P314: Call a POISON CENTER/doctor if you feel unwell.

Storage:

P391: Collect spillage.
 P403: Store in a well-ventilated place.
 P405: Store locked up.
 P420: Store away from incompatible materials.

Disposal:

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

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

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

Chemical Name	Weight %	CAS Number	EC Number
Vermiculite Classifications: Eye Irrit. 2: H319, STOT SE 3 : H335	35-38	1318-00-9	603-518-0
Portland Cement Classifications: Eye Irrit. 1: H318, Skin Corr. 2: H315, Skin Sens. 1: H317, STOT SE 3 : H335	32-38	65997-15-1	266-043-4
Gypsum (Calcium Sulfate) Classifications: N/A	17-20	7778-18-9	231-900-3
Calcium Carbonate Classifications: Skin Corr. 2: H315	3-6	1317-65-3	215-279-6
Silicate Wool Classifications: N/A	3-4	436083-99-7	610-130-5
Cellulose and Additives Classifications: N/A	> 2	9004-34-6	232-674-9

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.**

Skin Contact: Remove contaminated clothing and product; wash affected area with soap and water. Do not apply greases or ointments. If redness, burning, or swelling persists, **consult a physician.**

Ingestion: Rinse mouth. If you feel unwell, **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 redness, itching, burns, tearing, swelling and blurred vision; discomfort in the chest, shortness of breath, or coughing. May cause rash/ allergic reaction to skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. Inhalation may cause respiratory irritation. Long term exposure may cause chronic effects.

5. Fire-Fighting Measures

Suitable Extinguishing Media: This product is not expected to ignite under normal conditions of use. Water fog, carbon dioxide, dry chemical powder, foam. Use extinguishing media appropriate for surrounding material.

Additional Information: None known.

Hazards during Fire-Fighting: During a fire, gases hazardous to health may be formed.

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 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): Avoid dry sweeping. Do not use compressed air to clean spilled silica sand. Use wet towel to wipe up small spills. Dispose of in closed containers.

Large spills (uncured): Avoid dry sweeping. Do not use compressed air to clean spilled silica sand. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system. Dispose of in closed containers.

Cured Material: Chip or grind off. 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. Avoid generating dust. Use all available work practices to control dust exposure, such as water sprays. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Avoid contact

with eyes, skin, and clothing. Do not breathe dust. Wear a respirator if dust concentrations exceed permissible exposure limits. Do not permit dust to collect and build up on work surfaces, use good housekeeping. Avoid contact with unhardened cement products. Wash thoroughly after handling. Wash contaminated clothes before reuse. Observe good industrial hygiene practices. To obtain optimal performance from Simpson Strong-Tie products, the products must be properly installed and used in accordance with the installation instructions and design limits provided by Simpson Strong-Tie.

Storage

Use dust collection to trap dust produced during loading and unloading. Store in a closed container away from incompatible materials (See Section 10 of the SDS). Store in a cool, dry place out of direct sunlight, between 40-95°F (4-35°C). Store in a well-ventilated place. Protect against 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.
Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
Skin and Body Protection: Wear long sleeve shirts/long pants and other clothing as required to minimize contact. In case of dust production, dust-proof clothing. Avoid contact with unhardened cement products, if contact occurs wash immediately with soap and water.
Respirator Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.
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
Portland Cement (CAS 65997-15-1)	5 mg/m ³ (respirable) 15 mg/m ³ (Total dust)	1 mg/m ³	5 mg/m ³ (respirable) 15 mg/m ³ (Total dust)
Calcium Carbonate (CAS 1317-65-3)	5 mg/m ³ (respirable) 15 mg/m ³ (Total dust)	N/E	5 mg/m ³ (respirable) 10 mg/m ³ (Total dust)
Calcium Sulfate (CAS 7778-18-9)	5 mg/m ³ (respirable) 15 mg/m ³ (Total dust)	N/E	5 mg/m ³ (respirable) 10 mg/m ³ (Total dust)
Cellulose (CAS 9004-34-6)	5 mg/m ³ (respirable) 15 mg/m ³ (Total dust)	N/E	5 mg/m ³ (respirable) 10 mg/m ³ (Total dust)

9. Physical and Chemical Properties

Physical State: Solid	Freezing/Melting Point: N/E
Form: Powder	Boiling Point: N/E
Color: Gray	Flash Point: N/E
Odor: Characteristic	Evaporation Rate: N/E
Odor Threshold: N/E	Specific Gravity: N/E
pH: N/E	VOC: N/E
Flammability: N/E	U/L Flammability: N/E
Vapor Pressure: N/E	Vapor Density: N/E
Solubility: Slight in water	Kow: N/E
Decomposition: N/E	Density: 22-26 lbs/ft ³

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: Conditions which generate dust. Avoid unintentional contact with water. Cutting or welding may generate sulfur dioxide. Remove cured fireproofing prior to this type of work
Substances to Avoid: Not Applicable.

Hazardous Reactions: Hazardous polymerization will not occur.
Decomposition Products: Excessive heat may release sulfur dioxide as decomposition product. Carbon dioxide, carbon monoxide, oxides of nitrogen and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Harmful if swallowed.
Inhalation: Irritation to nose and respiratory tract. Prolonged inhalation may be harmful.
Skin contact: Causes severe skin burns. May cause sensitization by skin contact.
Eye contact: Causes serious eye damage. Particles can cause corneal abrasion.
Symptoms: Corrosive effects. Sensitization. Symptoms include burns; itching, burning, redness and tearing; discomfort in the chest, shortness of breath, or coughing. Rash/dermatitis.

Information on Toxicological Effects

Acute Effects

Toxicity: Harmful if swallowed. May be harmful if swallowed and enters airways.
Skin corrosion/irritation: Causes severe skin burns.
Eye damage/eye irritation: Causes serious eye damage.
Respiratory sensitization: No data available.
Skin sensitization: May cause allergic skin reaction.
Aspiration hazard: No data available.
Specific target organ toxicity
Single exposure: May cause respiratory irritation.

Chronic Effects

Germ cell mutagenicity: No data available
Carcinogenicity: May cause cancer.
Reproductive toxicity: No data available.
Specific target organ toxicity
Repeated exposure: Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation).

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Portland Cement (CAS 65997-15-1)	35-38	---	---	A4	---
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 certain pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on data on the components and the ecotoxicology of similar products. This material is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Avoid release to the environment.

Supporting Data

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

Other Adverse Effects

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 Considerations

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/international 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 Set Product: Chip or grind off. Dispose in closed container according to local/regional regulations.

14. Transportation Information

DOT: CSS V-Wrap™ FPS is not regulated for transport.

IMDG/IATA: CSS V-Wrap™ FPS is not regulated for transport.

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 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
Yes	Yes	No	No	No

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting): No

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
Portland Cement (CAS 65997-15-1)	35-38	---	---	A4	---

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

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

International Inventories

Australia	One or more components of this product have an unknown status on the Australian Inventory of Chemical Substances (AICS). Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
Canada	All components of this product are included on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).
China	One or more components of this product have an unknown status on the Inventory of Existing Chemical Substances in China (IECSC). Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
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. Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
Japan	One or more components in this product have an unknown status on the Inventory of Existing and New Chemical Substances (ENCS). Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
Korea	One or more components of this product have an unknown status on the Existing Chemicals List (ECL). Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
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 on the Philippine Inventory of Chemicals and Chemical Substances (PICCS). Contact Simpson Strong-Tie Environmental Health and Safety if the status of this product on the inventory is desired.
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: July 2022
Supersedes: New
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com.

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR:	Hazardous Product Regulations (Canada)
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)
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 V-Wrap™ FPS Fire Protection System
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.

Disclaimer

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

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Internal

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