Powder Loads *For Simpson Strong-Tie® Powder-Actuated Tools*

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: **P27SL2, P27SL3, P27SL4, P27SL5**
Recommended Use: Powder-Tool Loaded Rounds are for use with Simpson Strong-Tie® Powder-Actuated Tools.
Use Restrictions: Do not tamper with Powder Loads.

Company Identification

Company:	Simpson Strong-Tie Australia Pty Limited
Address:	Unit 1/16 Kenoma Place Arndell Park, NSW 2148 Australia
Phone:	+612 9831 7700
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

Powder Loads are single-shot and 10-shot strip loads for use with Simpson Strong-Tie® Powder-Actuated Tools. The Powder Loads are 0.27 caliber and are available at different levels. The components of this product are sealed within a cartridge. Under normal handling of this product, no exposure to any harmful materials will occur. When the product is fired, a small amount of particles containing trace amounts of harmful substances may be produced. These particles could result in the health hazards listed below. The product has been assessed according to the Globally Harmonized System (GHS). This Safety Data Sheet covers hazards and responses for the safe use and handling of Powder Loads.

GHS Classification

Classification according to HazCom2012 (GHS)

Physical Hazards:	Explosives	Division 1.4	H204: Fire or projection hazard
	Flammable Solid	Category 1	H228: Flammable solid
Health Hazards:	Reproductive Toxicity	Category 1A	H360: May damage fertility or the unborn child
	STOT, Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or 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: Long term exposure may cause chronic effects. Prolonged exposure to contents of cartridge may cause reproductive harm and depression to the central nervous system. Symptoms include headaches, dizziness, and nausea.

GHS Label Elements

Explosive | Flammable | Chronic Health | Environmental Hazard

Contains: Iron, Copper, Zinc, Nitrocellulose, Nitroglycerin, Normal Lead Styphnate
Signal Word: **DANGER!**
Hazard Statements:

H204:	Fire or projection hazard.
H228:	Flammable solid.
H360:	May damage fertility or the unborn child.
H373:	May cause damage to organs through prolonged or repeated exposure (CNS).
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.
	P201:	Obtain special instructions before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P210:	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
	P234:	Keep only in original packaging.
	P235:	Keep cool.
	P240:	Ground and bond container and receiving equipment.
	P241:	Use explosion-proof [electrical/ventilating/lighting/…] equipment.
	P250:	Do not subject to grinding/shock/friction.
	P260:	Do not breathe dust.
	P264:	Wash hands thoroughly after handling.
	P270:	Do not eat, drink, or smoke when using this product.
	P271:	Use only outdoors or in a well-ventilated area.
	P272:	Avoid release into environment.
	P280:	Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P301+P312:	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
	P302+P352:	IF ON SKIN: Wash with plenty of water.
	P332+P313:	If skin irritation occurs: Get medical advice/attention.
	P363:	Wash contaminated clothing before reuse.
	P304+P312:	IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
	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.
	P370+P378:	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
	P372:	Explosion risk.
	P373:	DO NOT fight fire when fire reaches explosives.
	P375:	Fight fire remotely due to the risk of explosion.
	P380:	Evacuate area.
	P391:	Collect spillage.
Storage:	P401:	Store in accordance with local/regional regulations.
Disposal:	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)

Powder Loads in Powder-Actuated Tools can result in serious injury or death with improper use. Always read instructions for safe use before handling Powder-Actuated Tools. The discharge of Powder Loads may result in a small amount of particles being generated, which may be irritating to respiratory tract. Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain. Nitroglycerin will produce dilation of blood vessels and drop in blood pressure which may affect the heart and has been shown to cause methemoglobinemia (cyanosis). Ensure that good work practices and the necessary precautionary measures are taken to maintain safe use of the product. If deemed necessary, an approved respirator can be used to control exposure to dust that may occur.

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.

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

Chemical Name	Weight %	CAS Number	EC Number
Iron **Classifications:** None.	0-97	7439-89-6	231-096-4
Copper **Classifications:** None.	50-65	7440-50-8	231-159-6
Zinc **Classifications:** Aquatic 1: H400+H410	15-32	7440-66-6	231-175-3
Nitrocellulose **Classifications:** Flam. Solid 1: H228	2-13	9004-70-0	618-392-2
Nitroglycerin **Classifications:** Expl. 1.1: H201, Acute Tox. 2: H300+330, Acute Tox. 1: H310, STOT RE 2: H373, Aquatic Chronic 2: H411	0.5-2	55-63-0	200-240-8
Lead Styphnate **Classifications:** Expl. 1.1: H201, Acute Tox. 4: H302+H332, Repr. 1A: H360, STOT RE 2: H373, Aquatic 1: H400+H410	0.1-1	15245-44-0	239-290-0

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 lukewarm water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If you experience redness, burning, blurred vision, or swelling, **consult a physician.**

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 occurs **consult a physician.**

Ingestion: This material is contained in a cartridge. Ingestion is unlikely. If ingestion occurs, rinse mouth immediately. Do not induce vomiting. **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

Prolonged exposure to contents of cartridge may cause reproductive harm and depression to the central nervous system. Symptoms include headaches, dizziness, and nausea.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Flood area with water. Alternatively, use water fog, foam, dry chemical powder, or carbon dioxide (CO_2). If fire reaches cargo, withdraw and let burn.

Additional Information: If fire reaches cargo, DO NOT fight. Evacuate all persons, including emergency responders, from a 1500 feet (1/3 mile) radius.

Hazards during Fire-Fighting: This product is explosive. If fire reaches cargo, withdraw.

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. Isolate fuel supply from fire. Move undamaged containers from fire area if you can do so without risk. If this is not possible, allow fire to burn. Cool equipment exposed to fire if can be done with minimal risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal Precautions

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

Emergency personnel: Keep unnecessary personnel away. Wear appropriate personal protective equipment.

Clean-Up Methods

Small spills: Do not subject material to mechanical shock. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended. Stop spill/release if it can be done with minimal risk. Wipe up small spills with a damp cloth. Clean surface thoroughly to remove residual contamination.

Large spills: Do not subject material to mechanical shock. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended. Isolate danger area and keep unauthorized personnel out. Call 1-888-289-1911 for technical assistance if a large spill occurs.

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.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practices. Avoid direct contact with heat and ignition sources. Do not subject to mechanical shock. Smoking and open flames should not be in the vicinity of the product. Avoid prolonged contact with skin, eyes, ingestion, and inhalation of dust. It is recommended that the product is used outside or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands well before eating, drinking, and/or smoking. Provide appropriate exhaust ventilation and dust collection at machinery. Avoid the formation and build-up of dust. Observe good industrial hygiene practices.

Storage

Store in accordance to local/regional regulations and standard codes. Store where it can be assured to be kept away from children. Store in a cool (41-77°F/5-25°C), well-ventilated, dry area, with the lid tightly sealed when not in use. Store away from incompatible materials (See Section 10 of the SDS). Keep in original packaging. Protect from heat and direct sunlight. Protect from dampness and humidity. Keep ignition sources away (do not smoke). Prevent impact and friction, and protect from physical damage.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: Wear appropriate personal protective equipment. Hearing protection is recommended when using product with Powder-Actuated Tools.

Eye Protection: Wear goggles or safety glasses with side shields.

Hand Protection: Protective work gloves recommended when using product with Powder-Actuated Tools.

Skin and Body Protection: Wear long sleeve shirt/long pants and other clothing as required to minimize contact.

Respirator Protection: The use of a respirator is not required during normal use of this product in properly ventilated areas. An NIOSH-approved respirator should be worn whenever workplace conditions warrant respirator use.

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

Engineering Controls

Mechanical ventilation or local exhaust ventilation is recommended. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls 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
Copper (CAS 7440-50-8)	1 g/m^3 (fume/dust/mist)	1 g/m^3 (fume/dust/mist)	1 g/m^3 (fume/dust/mist)
Zinc (CAS 7440-66-6)	5 mg/m^3 (fumes)	N/E	N/E
Nitrocellulose (CAS 9004-70-0)	5 mg/m^3 (resp.) 15 mg/m^3 (total)	N/E	5 mg/m^3 (resp.) 10 mg/m^3 (total)
Nitroglycerin (CAS 55-63-0)	0.2 ppm (ceiling, skin)	0.05 ppm (TWA, skin)	0.1 mg/m^3 (STEL, skin)
Lead Styphnate (CAS 15245-44-0)	0.05 mg/m^3 (TWA)	0.05 mg/m^3	N/E

9. Physical and Chemical Properties

Physical State:	Cylindrical brass/steel cartridge	**Freezing/Melting Point:**	N/A
Form:	Solid	**Boiling Point:**	N/A
Color:	Brass/Gray	**Flash Point:**	N/A
Odor:	Odorless	**Evaporation Rate:**	N/A
Odor Threshold:	N/E	**Specific Gravity:**	N/A
pH:	N/A	**VOC:**	N/A
U. Flammability:	N/A	**L. Flammability:**	N/A
Vapor Pressure:	N/A	**Vapor Density:**	N/A
Solubility:	Insoluble	**Kow:**	N/A
Decomposition:	N/A	**Viscosity:**	N/A

10. Stability and Reactivity

Reactivity: Stable under normal, ambient conditions of use and storage.
Chemical Stability: Stable under normal, ambient conditions of use and storage.
Condition to Avoid: Avoid all possible sources of ignition and mechanical shock. Cartridge may detonate if the casing is punctured or severely damaged.
Substances to Avoid: Acids, class A & B explosives, strong oxidizers, caustics.
Hazardous Reactions: Hazardous polymerization does not occur.
Decomposition Products: Carbon dioxide, carbon monoxide, lead dust/fume.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Ingestion is unlikely.
Inhalation: When the product is fired, a small amount of particles may be generated which may be irritating to respiratory tract. Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain. Nitroglycerin will produce dilation of blood vessels and drop in blood pressure which may affect the heart; it has also been shown to cause methemoglobinemia (cyanosis).
Skin contact: May cause mild skin irritation if exposed to cartridge contents.
Eye contact: Particles generated during use may cause eye irritation.
Symptoms: Prolonged exposure to contents of cartridge may cause reproductive harm and depression to the central nervous system. Symptoms include headaches, dizziness, and nausea.

Information on Toxicological Effects

Acute Effects

Toxicity: May be toxic if swallowed. Do not eat, drink, or smoke when using this product. Due to the nature of this product ingestion is highly unlikely. This product contains trace amounts of lead; ingestion of lead can be toxic. The likelihood of sufficient exposure from particles due to firing leading to adverse effects is minimal. Lead can cause abdominal pain, constipation, cramps, nausea and/or vomiting. Chronic exposure to lead can cause kidney damage, anemia, reproductive effects, developmental effects, and permanent nervous system damage in humans, including changes in cognitive function. If this product is ingested do NOT induce vomiting. Contact poison control/get medical attention.
Skin corrosion/irritation: May cause mild skin irritation if exposed to cartridge contents.
Eye damage/eye irritation: Particles generated during use may cause eye irritation.
Respiratory sensitization: No data available.
Skin sensitization: No data available.
Aspiration hazard: No data available.
Specific target organ toxicity
Single exposure: No data available.

Chronic Effects

Germ cell mutagenicity: This product has not shown to be mutagenic. The contents of the cartridge contain trace levels of lead, which has shown to be mutagenic. However, the risk of exposure and level of lead content is minimal, and therefore not expected to be hazardous.
Carcinogenicity: This product contains trace levels of lead, which is considered carcinogenic. However, the product itself is not expected to be carcinogenic.

Reproductive toxicity: May damage fertility or the unborn child.
Specific target organ toxicity
Repeated exposure: May cause damage to organs through prolonged or repeated exposure (CNS).

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	**% In Blend (approx.)**	**IARC Monographs**	**NTP**	**ACGIH**	**Other**
Lead Styphnate (CAS 15245-44-0)	0.1-1	---	---	---	CA65
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 classified as very toxic to aquatic life, with long lasting effects. Avoid release into the environment.

Supporting Data

Component		Species	Test Result
Zinc (CAS 7440-66-6)			
	Acute, *Fish,* LC50	Bony fish superclass	0.52-3.59 mg/l, 96 hours
	Acute, *Crustacea,* EC50	Daphnia magna	0.068 mg/l, 48 hours
Nitrocellulose (CAS 9004-70-0)			
	Acute, *Algae,* EC50	Microalgae	579 mg/l, 96 hours
Nitroglycerin (CAS 55-63-0)			
	Acute, *Fish,* LC50	Bluegill sunfish	1.91 mg/l, 96 hours

Persistence and degradability: No data available.
Bioaccumulative potential: Not expected to bioaccumulate.
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: Unspent cartridges are considered hazardous waste under 40CFR261, and is subject to the Land Disposal Restrictions under 40CFR268. Its EPA hazardous waste number is *D003*. Dispose of contents in accordance with local/regional/national/ international regulations.
Container Disposal: Completely discharged cartridges may be disposed of as household or factory waste, dispose according to federal, state, and local regulations.

14. Transportation Information

DOT: Cartridges for Tools, Blank / Limited Quantity
UN number: UN0014
UN proper shipping name: Cartridges for Tools, Blank
Transportation Class: 1.4S
Packing Group: II

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.
Note: LAND - See 49 CFR 173.63 for Limited Quantity Reclassification

Limited Quantity is not authorized for international air shipment. As of January 1, 2013 ORM-D is no longer valid for air shipment. ORM-D will no longer be valid for any mode, effective January 1, 2020.

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):

Copper (CAS 7440-50-8)	LISTED
Zinc (CAS 7440-66-6)	LISTED
Nitroglycerin (CAS 55-63-0)	LISTED
Lead (CAS 7439-92-1)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories: Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	Yes	Yes	Yes

SARA 302 Extremely hazardous substance: No
SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting):

Chemical Name	CAS Number	% by weight
Copper	7440-50-8	50-65
Zinc	7440-66-6	15-32
Nitroglycerin	55-63-0	0.5-2
Lead	7439-92-1	Trace

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
Lead (7439-92-1)	Trace	2B	ANTICIPATED	A3	CA65 (Developmental, Reproductive, Carcinogenic)
Lead Styphnate (15245-44-0)	0.1-1	---	---	---	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.

This product is regulated as a Class 6 Explosive.

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.

REACH Registered Substances			
Chemical	**CAS Number**	**EC Number**	**Index Number**
Zinc	7440-66-6	231-175-3	030-001-01-9
Nitroglycerin	55-63-0	200-240-8	603-034-00-X
Lead Styphnate	15245-44-0	239-290-0	609-019-00-4

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

International Inventories

Australia	All components of this product are listed on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC)
Europe	All components of this product are included 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	All components of this product are included 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 & 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: December 2022
Supersedes: New
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com.

Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS No.: Chemical Abstract Service Registry Number
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR: Hazardous Product Regulations (Canada)
DOT: Department of Transportation (U.S.)
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

Full Text of H-Phrases Under Section 3

H201: Explosive; mass explosion hazard.
H228: Flammable solid.
H300: Fatal if swallowed.
H302: Harmful if swallowed.
H310: Fatal in contact with skin.
H332: Harmful if inhaled.
H360: May damage fertility or the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

Disclaimer

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.