

1. Identification of Substance & Company**Product**

Product name	AT-HP
Product code	AT-HP
HSNO approval	HSR002629 for the hardener part, HSR002670 for the resin part.
Approval description	Hardener: Organic Peroxides Group Standard 2006 Resin: Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006
UN number	NA
Proper Shipping Name	NA
Packaging group	NA
Hazchem code	1T (recommended, no HAZCHEM signage necessary)
Uses	Anchoring Adhesive

Company Details

Company	Simpson Strong-Tie New Zealand
Address	28 Arrenway Drive Albany Auckland 0632 New Zealand
Telephone	+64 9 477 4440
Fax	+64 9 475 9724
Website	www.strongtie.co.nz

Emergency Telephone Number: 0800 POISON (0800 764 766)**2. Hazard Identification****Approval**

The final hardened material is considered non hazardous.

The two part of this product has been approved under the Hazardous Substances and New Organisms Act (HSNO), For the Hardener: Approval HSR002629, Organic Peroxides Group Standard 2006), for the Resin: Approval HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006) and is classified as follows:

Classes Hazard Statements

Hardener:	
5.2E	Heating may cause a fire.
6.3A	Causes skin irritation.
6.4A	Causes eye irritation.
6.5B	May cause an allergic skin reaction.

SYMBOLS**DANGER**

Resin:	
6.3B	Causes mild skin irritation.
6.4A	Causes eye irritation.
9.1D	May cause long lasting harmful effects to aquatic life.

SYMBOLS**WARNING**

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Precautionary Read label before use.
 Keep away from sources of ignition. No smoking.
 Keep/Store away from combustible materials.
 Keep only in original container.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Wash hands thoroughly after handling.
 Wear protective gloves/protective clothing."
 Avoid breathing vapour.
 Contaminated work clothing should not be allowed out of the workplace.

Store at temperatures not exceeding 25°C. Keep cool.
 Protect from sunlight.
 Store away from other materials.
 Avoid release to the environment.

Further precautionary statements can be found in Section 4 – First Aid.

3. Composition / Information on Ingredients

Hardener Part - Components	CAS/ Identification	Class for ingredient(s)	Concentration
Limestone	1317-65-3	estimated: 6.3A, 6.4A	25-50%
Dibenzoyl peroxide	94-36-0	5.2B, 6.4A, 6.5B (contact), 9.1D (fish), 9.1D (crustacean)	10-25%
Dicyclohexyl phthalate	84-61-7	6.3A, 6.4A	10-25%

Resin Part - Components	CAS/ Identification	Class for ingredient(s)	Concentration
Limestone	1317-65-3	6.3A, 6.4A	50-100%
p-tert-Butylstyrene	1746-23-2	6.3A, 6.4A, 6.9B, 9.1B	2.5-10%
Alkoxylated Pentaerythritol Acrylate	NA	6.3B, 6.4A	2.5-10%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is recommended. Accessible eyewash is recommended.

Exposure

Swallowed Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhaled Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	The Hardener part of this substance is an organic peroxide, which is an oxidiser. Oxidising materials can increase the intensity of fire.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.
Unsuitable extinguishing substances:	Do not use water jets.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of sulfur and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	NA

6. Accidental Release Measures

Containment	If greater than <i>100kg is stored</i> , secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to stormwater.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Stop the source of the leak, if safe to do so. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Do not use sawdust. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Use detergents to clean up spill site, do not use solvents.
Precautions	Not applicable Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Keep in original packaging. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Keep in a dry ventilated place. Avoid contact with incompatible substances as listed in Section 10.
Handling	Store between 5 and 25°C Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (OSH – DoL 2011)	Ingredient	WES-TWA	WES-STEL
	dibenzoyl peroxide	5mg/m ³	Data unavailable
	dicyclohexyl phthalate	5mg/m ³	data unavailable

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes



Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.

Respiratory

A respirator when airborne concentrations approach the WES (section 8). Use a respirator with an organic vapour cartridge and a particulate filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	Hardener: Viscous liquid, Resin: fluid liquid
Odour	No data
pH	Not applicable
Vapour pressure	No data
Viscosity	No data
Boiling point	No data
Volatile materials	No data
Freezing / melting point	No data
Solubility	Insoluble in water
Specific gravity / density	>1
Flash point	Not flammable
Danger of explosion	Heating may cause explosion (hardener)
Auto-ignition temperature	No data
Upper & lower flammable limits	No data
Corrosiveness	Non corrosive

10. Stability & Reactivity

Stability	These substances will react with each other. Follow recommended handling instructions and storage conditions. This mixture contains ingredients that are not stable in the following conditions: Strong UV radiation, free radical initiators, peroxides, strong alkali metals or reactants.
Conditions to be avoided	Oxidising substance - keep away from sources of ignition and flammable materials (see below). Keep away from water, moisture and humidity.
Incompatible groups	Flammable substances, oxidisers, acids, bases
Substance Specific Incompatibility	none known
Hazardous decomposition products	Oxides of carbon and sulfur
Hazardous reactions	This material can produce exothermic polymerisation reactions.

11. Toxicological Information

Summary

ON SKIN CONTACT: Repeated or prolonged contact with the mixture may cause defatting of the skin resulting in non-allergic contact dermatitis. Absorption through the skin is possible. May cause an allergic reaction by skin contact.
ON EYE CONTACT: may result in transient eye irritation.

Supporting Data

Acute	Oral	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the both parts of the mixture is >5,000 mg/kg. Data considered includes: dibenzoyl peroxide 1072mg/kg (mouse), 2255mg/kg (rat).
	Dermal	No evidence of dermal toxicity.
	Inhaled	No evidence of inhalation toxicity.
	Eye	The mixture is considered to be an eye irritant. Dibenzoyl peroxide, Dicyclohexyl phthalate, p-tert-Butylstyrene and the acrylate are all considered eye irritants at higher concentrations.
	Skin	The mixture is considered to be a skin irritant. Dibenzoyl peroxide, Dicyclohexyl phthalate, p-tert-Butylstyrene and the acrylate are all considered skin irritants at higher concentrations.
Chronic	Sensitisation	The hardener is considered to be a contact sensitizer. Dibenzoyl peroxide is a known contact sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	No ingredient present at concentrations > 1% is considered a known target organ toxicant.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

The resin part of this mixture may be harmful in the aquatic environment.

Supporting Data

Aquatic	p-tert-Butylstyrene is considered toxic to aquatic life.
Bioaccumulation	No data
Degradability	Not readily degradable.
Soil	No evidence of soil toxicity
Terrestrial vertebrate	This mixture is not considered ecotoxic to terrestrial vertebrates. See acute toxicity.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data
Environmental effect levels	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

UN number:	NA	Proper shipping name:	NA
Class(es)	NA	Packing group:	NA
Precautions:	Separate from flammables.	Hazchem code:	NA

15. Regulatory Information

This product is a two part substance. Both parts are approved substances under the Hazardous Substances and New Organisms Act (HSNO).

Hardener part: Approval code: HSR002629, Organic Peroxides Group Standard 2006.

Resin part: Approval code: HSR002670, Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

MSDS	To be available within 10 minutes in workplaces storing any quantity.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 100kg is stored.
Approved handler	Required if 10kg of the hardener is stored.
Tracking	Not required.
Bunding & secondary containment	Required if > 100kg is stored.
Signage	Required if storing >10kg.
Location test certificate	Required if storing >25kg.
Flammable zone	Not required.
Fire extinguisher	Required if storing >50kg.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Hardener: Approval HSR002629, Organic Peroxides Group Standard 2006 Approval HSR002670, Resin: Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006, Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS	Material Safety Data Sheet (or Safety Data Sheet)
OSH - DoL	The Occupational Safety and Health Service of the Department of Labour (NZ)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2011	The NZ Workplace Exposure Standards Effective from 2011, published by OSH – DoL and available on their web site – www.osh.dol.govt.nz .
Other References:	Simpson Strong tie MSDS from UK and US.

Review

Date	Reason for review
December 2012	Not applicable – new MSDS

Disclaimer

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this MSDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

