Sure-weld TPO Bonding Adhesive
Safety Data Sheet

1. Identification of Substance & Company

Product

Product name	Sure-weld TPO Bonding Adhesive
HSNO approval	HSR002669
Approval description	Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006
UN number	1263
Proper Shipping Name	PAINT
DG class	3
Packaging group	II
Hazchem code	3YE
Uses	contact adhesive

Company Details

Company	**Allco Waterproofing Solutions**	
Address	5 Te Kia Place Albany Auckland New Zealand	PO Box 101-903 North Shore City 0745 New Zealand
Telephone	+64 9 448 1185	
Website	www.allco.co.nz	

Emergency Telephone Number: 021 441 329

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002669, Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006), and is classified as follows:

Classes	Hazard Statements
3.1B	H225 - Highly flammable liquid and vapour.
6.1E (aspiration)	H304 - May be fatal if swallowed and enters airways.
6.1D (oral)	H302 - Harmful if swallowed.
6.3A	H315 - Causes skin irritation.
6.4A	H320 - Causes eye irritation.
6.5B	H317 - May cause an allergic skin reaction.
6.7B	H341 - Suspected of causing cancer.
6.8B	H361 - Suspected of damaging fertility or the unborn child. (state route if known)
6.9B	H373 - May cause damage to organs through prolonged or repeated exposure.
6.9 (narcotic)	H336 - May cause drowsiness or dizziness.
9.1B	H411 - Toxic to aquatic life with long lasting effects.
9.3C	H433 - Harmful to terrestrial vertebrates.

SYMBOLS

DANGER

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

Read label before use.
Keep out of reach of children.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.\
Keep away from ignition sources. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/eye/face protection.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
IF exposed or concerned: Get medical advice/ attention.
Avoid release to the environment.
Collect spillage.
Store in a well-ventilated place. Keep cool.
Store locked up
Keep container tightly closed.

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

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Toluene	108-88-3	15-40%
Solvent naphtha (petroleum), light aliphatic	64742-89-8	10-30%
Acetone	67-64-1	5-10%
Polychloroprene	9010-98-4	7-13%
Heat reactive phenolic resin	trade secret	1-5%
Styrene Butadiene polymer	trade secret	0.5-1.5%
Chlorinated polypropylene	trade secret	0.5-1.5%
Xylene	1330-20-7	0.5-1.5%
Polyphenol antioxidant	trade secret	0.1-1.0%
Magnesium oxide	1309-48-4	0.1-1.0%
Zinc oxide	1314-13-2	0.1-1.0%
Ethylbenzene	100-41-4	0.1-1.0%

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 harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice/ attention.

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

Exposure

Swallowed — IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTRE or doctor/physician if you feel unwell.

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 (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Inhaled	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Vapours may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder, foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide 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:	3YE

6. Accidental Release Measures

Containment	If greater than 1000L is stored, 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	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	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. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. Location test certificates must be available if storing >100L (containers >5L), 250L (containers ≤5L), 50L (in use). Containers (and outer packaging) must bear the prescribed labelling, including the Hazchem code, UN number, flammability warning and name of contents.
Handling	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 WorkSafe NZ for this product. There is a general limit of 10mg/m^3 for dusts and mists when limits have not otherwise been established.

	Ingredient	WES-TWA	WES-STEL
NZ Workplace Exposure Stds (2013)	Toluene	50ppm, 188 mg/m^3 (skin)	data unavailable
	Solvent naphtha (petroleum), light aliphatic	data unavailable	data unavailable
	Acetone	500ppm, 1185mg/m^3	1000ppm, 2375 mg/m^3
	Magnesium oxide	10mg/m^3 (fume)	data unavailable
	Zinc Oxide	5mg/m^3 (fume)	data unavailable
	Xylene	50ppm, 217mg/m^3	data unavailable
	Ethylbenzene	100ppm, 434mg/m^3	data unavailable

* These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

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 at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. 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

Protective gloves are recommended. PVC or rubber gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use.

Respiratory

A respirator when airborne concentrations approach the WES (section 8). Use a respirator with an organic vapour cartridge. 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	yellowish liquid
Odour	hydrocarbon odour
pH	no data
Vapour pressure	54.1mmHg
Vapour density	3.2 (air =1)
Viscosity	2500 cps
Boiling point	56 - 137 °C
Volatile materials	670 g/L
Freezing / melting point	-95 - -47°C
Solubility	negligible in water
Specific gravity / density	0.849 g/cm^3
Flash point	-20°C
Danger of explosion	no data
Auto-ignition temperature	230°C
Upper & lower flammable limits	LEL: 1%, UEL: 12.8%
Corrosiveness	non corrosive

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Flammable substance. Keep away from sources of ignition at all times. Containers should be kept closed in order to avoid contamination.
Incompatible groups	Strong oxidisers, acids, bases
Substance Specific Incompatibility	none known
Hazardous decomposition products	Oxides of carbon, oxides of nitrogen.
Hazardous reactions	none known

11. Toxicological Information

Summary

IF SWALLOWED: May be fatal if swallowed and enters airways. May cause gastrointestinal irritation.
IF IN EYES: Causes serious eye irritation.
IF ON SKIN: Causes skin irritation. May cause allergic skin reaction.
IF INHALED: May cause drowsiness or dizziness. May cause respiratory irritation.
CHRONIC TOXICITY: Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: central nervous system, respiratory system, blood, liver.

Supporting Data

Acute	**Oral**	Using LD_{50}'s for ingredients, the calculated LD_{50} (oral, rat) for the mixture is between 300 and 2000 mg/kg. Data considered includes: Toluene 636 mg/kg (rat), Solvent naphtha (petroleum), light aliphatic no, Acetone 3000 mg/kg (mouse).
	Dermal	No evidence of dermal toxicity.
	Inhaled	Using LC_{50}'s for ingredients, the calculated LC_{50} (inhalation, rat) for the mixture is 20mg/L (vapour). Data considered includes: Toluene 12.5 - 28.8 mg/l (vapour, rat),
	Eye	The mixture is considered to be an eye irritant, because some of the ingredients (toluene, solvent naphtha (petroleum), light aliphatic, acetone) present are considered eye irritants in more concentrated form.
	Skin	The mixture is considered to be a skin irritant, because some of the ingredients (toluene, solvent naphtha (petroleum), light aliphatic, acetone) present are considered skin irritants in more concentrated form.
Chronic	**Sensitisation**	The mixture is considered to be a contact sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	The mixture is considered to be a suspected carcinogen. Ethylbenzene is classed by IARC as Group 2B (possibly carcinogenic to humans).
	Reproductive / Developmental	The mixture is considered to be a suspected reproductive or developmental toxicant. Xylene and toluene are classed 6.8B by EPA.
	Systemic	The mixture is considered to be a suspected target organ toxicant. Xylene and toluene may affect the CNS.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This mixture is toxic towards aquatic organisms with long lasting effects and harmful towards terrestrial vertebrates.

Supporting Data

Aquatic	Using EC_{50}'s for ingredients, the calculated EC_{50} for the mixture is between 1 mg/L and 10 mg/L and at least one of the components is either bioaccumulative or persistent in the aquatic environment. Data considered includes: Toluene 5.8 mg/l *(96hr, Oncorhynchus* mykiss), 11.5 mg/l (48hr, Daphnia magna), 12.5mg/L (72hr, Algal).
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	Considered as ecotoxic to terrestrial vertebrates. Using LD_{50}'s for ingredients, the calculated LD_{50} (oral, rat) for the mixture is between 500 and 2000 mg/kg. See acute toxicity.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data

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

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangrous good for transport.

UN number:	1263	**Proper shipping name:**	PAINT
Class(es)	3	**Packing group:**	II
Precautions:	Flammable liquid	**Hazchem code:**	3YE

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002669, Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006.

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

Key workplace requirements are:	
SDS	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 > 1000L is stored.
Approved handler	Required if > >250L (for containers >5L), >500L (for containers <5L) is handled or stored.
Tracking	Not required.
Bunding & secondary containment	Required if > 1000L is stored.
Signage	Required if > 250L is stored in any one location.
Location test certificate	Required if > 100L (containers >5L), 250L (containers ≤5L), 50L (in use) is stored in any one location.
Flammable zone	Must be established if > 100L (closed containers), 25L (decanting), 5L (open occassionally), 1L (in use), stored in any one location is stored in any one location.
Fire extinguisher	If > 250L present.

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 and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR002669, Surface Coatings and Colourants (Flammable, Toxic [6.7]) 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).
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority
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
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
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 during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
WES 2013	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
WES 2002	Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.
Other References:	Suppliers SDS

Review

Date	**Reason for review**
June 2016	Not applicable – new SDS

Disclaimer