



Hi-Tuff EPDM SA-747 Splice Adhesive

Safety Data Sheet

May 2019

SECTION 1 – CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product:

Product Name:	Hi-Tuff EPDM SA-747 Splice Adhesive
Other Names:	Weatherbond Multi-Purpose Primer
Product Code:	ESSA1, ESSA4
HSNO Approval:	HSR002662
Approval Description:	Surface Coatings & Colorants (Flammable) Group Standard 2017
UN Number:	UN1133
Proper Shipping Name:	ADHESIVES
DG Class:	3
Packing Group:	II
Hazchem Code:	3YE
Uses:	Splicing Adhesive for EPDM Single Ply Roofing Membrane

Company Details:

Company:	Sealco Limited
Address:	31 Newtown St, Bromley, Christchurch PO Box 35-190, Shirley, Christchurch
Telephone:	03 366 9495, 0508 292 837
Website:	www.sealco.co.nz

Emergency Number:

National Poisons Centre
0800 764 766

SECTION 2 – HAZARDS IDENTIFICATION

Approval:

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002662, Surface Coatings & Colourants (Flammable) Group Standard 2017). The substance has been classified as hazardous according to the criteria in the Hazardous substances (Minimum Degrees of Hazard) Notice 2017.

Classes:

3.1B
6.1D (Inhalation)
6.1D (Oral)
6.1E (Respiratory irritation)
6.3A
6.4A
6.8B

Hazard Statements:

H225 - Highly flammable liquid & vapour
H332 – Harmful if inhaled
H302 – Harmful if swallowed
H335 – May cause respiratory irritation
H315 - Causes skin irritation
H320 – Causes eye irritation
H361 – Suspected of damaging fertility or the unborn child



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6.9B	H371 – May cause damage to organs through prolonged or repeated exposure
9.1D	H402 – Harmful to aquatic life
9.3C	H433 – Harmful to terrestrial vertebrates

DANGER Symbols



Other Classifications:

There are no other classifications that are known to apply

Precautionary Statements:

- P101** – If medical advice is needed, have product container or label at hand
- P102** – Keep out of reach of children
- P103** – Read label before use
- 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.
- P233** – Keep container tightly closed
- P240** – Ground/bond container and receiving equipment
- P241** – Use explosion-proof electrical equipment
- P242** – Use only non-sparking tools
- P243** – Take precautionary measures against static discharge
- P260** – Do not breathe vapours
- 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
- P273** – Avoid release to the environment
- P280** – Wear protective gloves / eye protection / face protection
- P301+P312** – If SWALLOWED. Call a POISON CENTRE or doctor if you feel unwell
- P330** – Rinse mouth
- P331** – Do NOT induce vomiting
- P302+P352** – If ON SKIN: Wash with plenty of soap and water
- P332+P313** – If skin irritation occurs, Get medical advice / attention
- P362** – Take off contaminated clothes and wash before re-use
- P305+P351+P338** - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P313+P337** – If eye irritation persists seek medical advice / attention
- P308+P313** – IF exposed or concerned, get medical advice / attention
- P304+P340** - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- P391** – Collect spillage



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P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local regulations.

SECTION 3 – INFORMATION ON INGREDIENTS

CAS / Identification	Component	Conc (%)
Trade Secret	Polyphenol antioxidant	0.1-1
Mixture	Silicon adsorbent mixture	0.5-1.5
1330-20-7	Xylene	7-13
108-88-3	Toluene	30-60
64742-89-8	Solvent naphtha, petroleum, light aliphatic	5-10
67-63-0	Anhydrous isopropanol	5-10
Trade Secret	Tetraisopropyl titanate	1-5
Trade Secret	Phenolic resin	0.1-1
142-82-5	Heptane	5-10

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

SECTION 4 – FIRST AID MEASURES

Description of Necessary Measures

IF exposed or concerned: Get medical advice/attention.

Inhalation - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if not breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin - Remove/Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention.

Eyes - Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion - If swallowed, do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.



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Most Important Symptoms/Effects

Acute - Causes skin irritation. Causes serious eye irritation. Causes damage to organs: central nervous system, respiratory system, kidneys, liver. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed - Causes damage to organs through prolonged or repeated exposure: central nervous system, respiratory system, kidneys, Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: liver, spleen, Cardiovascular system.

Note to Physicians - Contains: toluene, xylene, heptane, isopropanol.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam or carbon dioxide. Water may be ineffective. Use water spray to keep containers cool.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Highly flammable liquid and vapor. Can burn and explode easily when exposed to open flames or high heat. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

Hazardous Combustion Products

Oxides of carbon, oxides of nitrogen.

Fire Fighting Measures

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. SDS – Hi-Flex EPDM SA-747 Splice Adhesive
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Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Avoid breathing vapors. Ventilate affected area. Absorb with earth, sand or other noncombustible material and transfer to container. Use non-sparking tools. Dike for later disposal. Dispose in accordance with all applicable regulations.



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Environmental Precautions

Avoid release to the environment.

SECTION 7 – HANDLING & STORAGE

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid contact during pregnancy/while nursing. KEEP OUT OF REACH OF CHILDREN.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place.

Keep container tightly closed.

Keep cool

Store locked up

Keep dry.

Keep away from heat and ignition sources.

Keep away from incompatible materials.

Do not cut, puncture, or weld on or near this container.

Incompatible Materials

Strong oxidizing agents, acids, bases

SECTION 8 – EXPOSURE CONTROL & PERSONAL PROTECTION

Workplace Exposure Standards:

A workplace exposure standard has not been established by Worksafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Standards

Ingredient	WES-TWA	WES-STEL
Toluene	50ppm, 188mg/m ³ (skin)	Not available
Xylene	50ppm, 217mg/m ³	Not available
Heptane	400ppm, 1640mg/m ³	500ppm, 2050mg/m ³

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



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Engineering Controls:

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far as below the WES as practicable. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at their source, or other methods. If you believe air borne concentrations of mist, dust or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment:



Eyes: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection: Wear chemical protective clothing & boots to prevent repeated or prolonged skin contact. Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

Respiratory Protection: An approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Appearance	Black liquid	Physical State	Liquid
Odour	Hydrocarbon	Colour	Black
Odour Threshold	Not available	pH	Not available
Melting Point	-95 to -47 °C (-139 to -53 °F)	Boiling Point	90 - 141 °C (194-286 °F)
Freezing Point	Not available	Evaporation Rate	2.3
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Auto-ignition	230 °C (475 °F)	Flash Point	-13 °C (8 °F)
Lower Explosive Limit	0.9%	Decomposition	Not available
Upper Explosive Limit	7%	Vapor Pressure	21.8 mmHg
Vapor Density (air=1)	3.4	Specific Gravity (water=1)	Not available
Water Solubility	Negligible	Viscosity	3600 cps
Density	0.882 (relative)	VOC	605 g/L



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SECTION 10 – STABILITY & REACTIVITY

Reactivity	No reactivity hazard is expected
Chemical Stability	Stable under normal conditions of use.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur
Conditions to Avoid	Avoid fire, sparks, static electricity and hot surfaces
Incompatible Materials	Strong oxidizing agents, acids, bases
Hazardous decomposition products	Oxides of carbon, oxides of nitrogen

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation - May cause respiratory irritation. May cause drowsiness or dizziness.

Skin Contact - Causes skin irritation.

Eye Contact - Causes serious eye irritation.

Ingestion – May cause gastrointestinal irritation.

Acute and Chronic Toxicity Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Polyphenol antioxidant (Trade Secret)

Oral LD50 Rat >200 mg/kg
Dermal LD50 Rabbit >5010 mg/kg
Inhalation LC50 Rat >165 mg/L 1 h

Toluene (108-88-3)

Oral LD50 Rat 2600 mg/kg
Dermal LD50 Rabbit 12000 mg/kg
Inhalation LC50 Rat 12.5 mg/L 4 h

Xylene (1330-20-7)

Oral LD50 Rat 3500 mg/kg
Dermal LD50 Rabbit >4350 mg/kg
Inhalation LC50 Rat 29.08 mg/L 4 h

Solvent naphtha, petroleum, light aliphatic (64742-89-8)

Oral LD50 Mouse 5000 mg/kg
Dermal LD50 Rabbit 3000 mg/kg

Anhydrous isopropanol (67-63-0)

Oral LD50 Rat 1870 mg/kg
Dermal LD50 Rabbit 4059 mg/kg



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Inhalation LC50 Rat 72600 mg/m³ 4 h

Tetraisopropyl titanate (Trade Secret)

Oral LD50 Rat 7460 µL/kg

Dermal LD50 Rabbit >16 mL/kg

Heptane (142-82-5)

Oral LD50 Mouse 5000 mg/kg

Dermal LD50 Rabbit 3000 mg/kg

Inhalation LC50 Rat 103 g/m³ 4 h

Immediate Effects

Causes skin irritation. Causes serious eye irritation. Causes damage to organs: central nervous system, respiratory system, kidneys, liver. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed Effects

Causes damage to organs through prolonged or repeated exposure: central nervous system, respiratory system, kidneys, Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: liver, spleen, Cardiovascular system.

Irritation/Corrosivity Data

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause gastrointestinal irritation.

Respiratory Sensitization

No data available.

Dermal Sensitization

It may cause sensitization in some individuals.

Component Carcinogenicity

Toluene	108-88-3	IARC	3
Xylene	1330-20-7	IARC	3
Anhydrous Isopropanol	67-63-0	IARC	3
Magnesium Oxide	1309-48-4	IARC	Data unavailable

Germ Cell Mutagenicity - No data available.

Reproductive Toxicity - No data available.

Specific Target Organ Toxicity - Single Exposure - central nervous system, respiratory system, kidneys, liver

Specific Target Organ Toxicity - Repeated Exposure - central nervous system, respiratory system, kidneys, Hematopoietic System, spleen, Cardiovascular system, liver

Aspiration hazard - No data available.

Medical Conditions Aggravated by Exposure - Aspiration into the lungs may cause chemical pneumonitis.

Additional Data - No additional information available



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SECTION 12 – ECOLOGICAL INFORMATION

Summary

This mixture may be harmful towards aquatic organisms and terrestrial vertebrates.

Aquatic – Using EC50's for ingredients, the calculated EC50 for the mixture is between 1 mg/L and 1000mg/L. Data considered includes: Toluene 5.8mg/l (96 hr, Oncorhynchus mykiss), Xylene 9.59mg/l (96 hr, Lepomis macrochirus), Heptane 375mg/l (96 hr Cichlid fish)

Bioaccumulation – No data

Degradability – No data

Soil – No evidence of soil toxicity

Terrestrial Vertebrate – The mixture is considered harmful to terrestrial vertebrates. See acute toxicity above.

Terrestrial Invertebrate – No evidence of toxicity towards terrestrial invertebrates

Biocidal – No data

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14 – TRANSPORT INFORMATION

Land Transport Rule: Hazardous Goods 2005 – NZS 5433:2007

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

Shipping Name:	ADHESIVE	Packing Group:	II
UN #	UN1133	HAZCHEM Code	3YE
Hazard Class:	3	Precautions:	Flammable Liquid

SECTION 15 – REGULATORY INFORMATION

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002662, Surface Coatings and Colourants (Flammable) Group Standard 2017).



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

Key Workplace requirement are:

SDS	To be available in 10 minutes any workplace storing any quantity
Inventory	An inventory of all hazardous substances must be prepared and maintained
Packaging	All hazardous substances should be appropriately packaged, including substances that have been decanted, transferred or manufactured for own use or have been supplied
Labelling	Must comply with the Hazardous Substances (Labelling) Notice 2017
Emergency Plan	Required if > 1000L is stored
Certified Handler	Not required
Tracking	Not required
Bunding & Secondary Containment	Required if > 1000L is stored
Signage	Required if > 250 L is stored in one location
Location Compliance Certificate	Required if > 100L (containers > 5L), 250 L (\leq 5L containers) 50L (in use) is stored in any one location
Flammable Zone	Must be established if > 100L (closed containers), 25L (decanting), 5L (open occasionally), 1L (in use) is stored in any one location
Fire Extinguisher	If > 250L is present

Section 16 – OTHER INFORMATION

Other Information

HMIS Rating

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Abbreviations:

CAS Number	Unique Chemical Abstracts Service Registry Number
Controls Matrix	List of default controls linking regulation numbers to Matrix code
EC50	Ecotoxic Concentration 50% - concentration in water which is fatal to 50% of a test population (eg. Daphnia, fish species)
EPA	Environmental Protection Authority
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially firefighters
HSNO	Hazardous Substances and New Organisms (Act & Regulations)
IARC	International Agency for Research on Cancer



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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 (SDS)	Material Safety Data Sheet (Safety Data Sheet)
NZIoC	New Zealand Inventory of Chemicals
PES	Prescribes 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
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 workday (usually 8 hours)
UEL	Upper Explosive Limit
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 per day, 5 days per week) The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the workers breathing zone

Disclaimer:

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