



EpiSEAM EPDM SA-747 Splice Adhesive

Safety Data Sheet

July 2021

SECTION 1 – CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product:

Product Name:	EpiSEAM EPDM SA-747 Splice Adhesive
Other Names:	Hi-Tuff SA-747 Seam Adhesive, 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:	Unit 5 / 18 Taurus Place, 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
6.9B

9.1D
9.3C

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
H371 - May cause damage to organs through prolonged or repeated exposure
H402 - Harmful to aquatic life
H433 - Harmful to terrestrial vertebrates

DANGER Symbols



Other Classifications:

There are no other classifications that are known to apply

Precautionary Statements:

Prevention

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

Response

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+313 -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

Storage

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

P405 - Store locked up.

Disposal

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.

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 Page 4

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.

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	CAS	WES-TWA	WES-STEL
Toluene	108-88-3	50 ppm, 188 mg/m ³ (skin)	Not available
Xylene	1330-20-7	50 ppm, 217 mg/m ³	Not available
Heptane	142-82-5	400 ppm, 1640 mg/m ³	500 ppm, 2050 mg/m ³
Anhydrous Isopropanol	67-63-0	400 ppm / 983 mg/m ³	500 ppm / 1230 mg/m ³
Magnesium Oxide	1309-48-4	10 mg/m ³	Not available

*These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health & 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 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

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

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

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).

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 (≤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
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

Review

Date	Reason for Review	Version
May 2019	Not applicable – New SDS	1
July 2021	Update business address	2

Disclaimer:

This SDS was prepared by Sealco Ltd and is based on our current knowledge, including information obtained by suppliers. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The SDS 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 and how the substance is used. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.