



Hi-Flex Lap Sealant

Safety Data Sheet

May 2019

SECTION 1 – CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product:

Product Name:	Hi-Flex EPDM Lap Sealant
Other Names:	N/A
Product Code:	ESLB
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:	Sealant for EPDM 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
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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
6.1E (Aspiration)
6.3A
6.4A
6.9B (Narcotic)
9.1B

Hazard Statements:

H225 - Highly flammable liquid & vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H411 - Harmful to aquatic life with long lasting effects



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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
- 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
- P261** – Avoid breathing vapours
- P264** – Wash hands thoroughly after handling
- 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+P310** – If SWALLOWED. Immediately call a POISON CENTRE or doctor if you feel unwell
- 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
- P304+P340** - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- P391** – Collect spillage
- P403+P235** - Store in a well-ventilated place. Keep cool.
- P405** - Store locked up.
- P501** - Dispose of contents/container in accordance with local regulations.



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SECTION 3 – INFORMATION ON INGREDIENTS

CAS / Identification	Component	Conc (%)
Not Applicable	Ground coal	1-5
Trade Secret	Silica Compound	1-5
Trade Secret	Severely hydrotreated paraffinic oil	3-7
1317-65-3	Limestone	10-30
Trade Secret	Carbon Compound	1-5
Trade Secret	Polyphenol Antioxidant	0.1-1
64742-89-8	Naphtha, Petroleum, Light aliphatic	10-30
Trade Secret	Polybutene	1-5
Mixture	Terpene Phenolic Resin	1-5
12001-26-2	Mica	0.1-1
64742-88-7	Solvent naphtha, petroleum, medium aliphatic	10-30

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

Remove person to fresh air and keep comfortable for 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

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

If swallowed, get medical attention. Do NOT induce vomiting.

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. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed - Causes damage to organs through prolonged or repeated exposure: lungs, central nervous system.



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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

Can burn and explode easily when exposed to open flames or high heat.

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.

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 non-combustible material and transfer to container. Use non-sparking tools. Dike for later disposal.

Environmental Precautions

Avoid release to the environment.

SECTION 7 – HANDLING & STORAGE

Precautions for Safe Handling

Keep away from heat/sparks/open flame/hot surfaces - No smoking. Do not eat or drink when using this product. 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. Wash contaminated clothing before reuse. KEEP OUT OF REACH OF CHILDREN.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep cool

Keep container tightly closed

Store locked up

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



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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
Solvent Naphtha (Petroleum)	100ppm, 525mg/m ³	Not available
Limestone	10mg/m ³ (Calcium carbonate)	Not available
Hydrotreated Paraffinic Oil	5mg/m ³	Not available
Ground Coal	3mg/m ³	Not available
Silica Compound – Crystalline Silica	0.1mg/m ³	Not available
Mica (May contain crystalline silica)	0.1mg/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.

Biological limit value

There are no biological limit values for any of this product's components.

Personal Protective Equipment:



Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection - Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection - Wear appropriate work clothing. Wear protective shoes. Recommended material: protective skin cream. Wear appropriate chemical resistant gloves.



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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	Viscous paste	Physical State	Liquid
Odour	Hydrocarbon	Colour	Black
Odor Threshold	Not available	pH	Not available
Boiling Point Range	<18 °C	Melting Point	119-185°C
Freezing Point	<18 °C	Evaporation Rate	3.5
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Auto-ignition	230°C (446 °F)	Flash Point	4.4°C (40 °F)
Lower Explosive Limit	0.8%	Decomposition	Not available
Upper Explosive Limit	6.7%	Vapour Pressure	8.27 mmHg
Vapor Density (air=1)	4	Specific Gravity (water=1)	1.03-1.04
Water Solubility	Negligible	Viscosity	1100000 cps
Solubility (Other)	Hydrocarbons	VOC	390-400 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 heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials
Incompatible Materials	Strong oxidizing agents, acids and 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.

Skin Contact - Causes skin irritation.

Eye Contact - Causes serious eye irritation.

Ingestion - May cause gastrointestinal irritation.



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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:

Severely hydrotreated paraffinic oil (Trade Secret)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Carbon compound (Trade Secret)

Oral LD50 Rat >15400 mg/kg

Polyphenol antioxidant (Trade Secret)

Oral LD50 Rat >200 mg/kg

Dermal LD50 Rabbit >5010 mg/kg

Naphtha, petroleum, light aliphatic (64742-89-8)

Oral LD50 Mouse 5000 mg/kg

Dermal LD50 Rabbit 3000 mg/kg

Solvent naphtha, petroleum, medium aliphatic (64742-88-7)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit 3000 mg/kg

Silica, crystalline (14808-60-7)

Oral LD50 Rat 500 mg/kg

Immediate Effects - Cause skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause gastrointestinal irritation.

Delayed Effects - Causes damage to organs through prolonged or repeated exposure: lungs, central nervous system.

Irritation/Corrosivity Data - Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Respiratory Sensitization - No data available.

Dermal Sensitization - It may cause sensitization in some individuals.

Germ Cell Mutagenicity - No data available

Reproductive Toxicity - No data available

Specific Target Organ Toxicity - Single Exposure - May affect the central nervous nervous system: drowsiness, dizziness.

Specific Target Organ Toxicity - Repeated Exposure - May cause damage to organs through prolonged or repeated exposure: lungs, central nervous system.

Aspiration hazard - May cause aspiration hazard.

Medical Conditions Aggravated by Exposure - May cause allergic skin reaction. Aspiration into the lungs may cause chemical pneumonitis.

Additional Data

This product contains crystalline silica, which is a known carcinogen. However, this component is bound by the polymer portion of the sealant. The only way this component would be released is through incineration. Therefore, this product is not considered a carcinogen.



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SECTION 12 – ECOLOGICAL INFORMATION

This mixture may be harmful towards aquatic organisms with long lasting effects

Aquatic – Using EC50's for ingredients, the calculated EC50 for the mixture is between 1 mg/L and 10mg/L. Data considered includes: Solvent naphtha (petroleum), medium aliphatic 2200mg/L (96hr, fish), 2.6mg/L (96hr, Crustacea), NOEL: 0.48mg/L

Bioaccumulation – No data

Degradability – No data

Soil – No evidence of soil toxicity

Terrestrial Vertebrate – The mixture is not considered harmful 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

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:	ADHESIVES	Packing Group:	II
UN #	UN1133	HAZCHEM Code	3YE
Hazard Class:	3	Precautions:	Ecotoxic

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



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	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	Required if > not required is handled or stored
Tracking	Required to be tracked if > not required is present
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

HMIS Rating

Health: 1 Fire: 3 Reactivity: 0

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

NFPA Ratings

Health: 1 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)



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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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