

## SEAL-FLEX

### **Multi-purpose general adhesive & joint sealant curing to a flexible rubber seal.**

Seal-Flex is a quality general purpose polyurethane (PU) adhesive and joint sealant that works well in both numerous industrial and construction applications. Seal-Flex cures fast to form a permanent durable flexible seal which can absorb vibration and is paintable.

Seal-Flex can be used on numerous materials such as steel, aluminium\*, concrete, masonry, brick, ceramic, cement sheets, plasterboards, timber and many plastics (not glass).

### **Characteristics**

- Easy to use sealant and adhesive
- Good bond strength and fast cure on most surfaces
- Permanently elastic and waterproof after cure
- Great for sealing joints
- Paintable with many different types of paints\*
- Colour stability and UV resistant
- Can be sanded after cure

### **Application examples**

- General bonding & sealing in truck body building industries
- All facets of the building & construction industries
- Flexible elastic rubber joint – vibrating construction joints
- Sheet metal fabrication and many other industrial uses
- Paintable gap filler and sealant

### **Colours**

White, Black and grey cartridges. Grey sausage.

### **Packaging**

310 ml cartridge ; 600 ml sausages (foil)

### **Shelf life**

9 months in unopened packaging in a dry and cool storage place at temperatures between +5 °C and + 25 °C. Do not expose to frost and temperatures above 40°C

### **Joint dimensions**

Min. Width for bonding: 2 mm  
Min. Width for joints: 5 mm  
Max. Width for bonding : 10 mm  
Max . width for joints: 30 mm  
Min. Depth for joints: 5 mm  
Recommendation sealing : joint width = 2 X joint depth.

## Technical data

Base	Polyurethane
Consistency	Light paste
Curing System	Moisture cure
Skin Formation *	Approx. 10 – 15 minutes
Curing Rate *	3 mm/24 hours
Hardness	40 +/- 5 Shore A
Specific Gravity	1.26 +/- 0.02
Temperature Resistance	-30 °C to +90 °C
Elongation at Break	>600%
Elasticity Modulus 100% (DIN 53504)	>0.6 N/mm <sup>2</sup>
Elastical Recovery	>80 %
Breaking strength (DIN 53504)	1.6 N/mm <sup>2</sup>

## Instructions for use

Surface preparation: Clean, free of dust and grease.  
Priming: For porous surfaces Primer 100 may be applied. Non porous substrates prepare with Aerobolt cleaner.

We recommend preliminary adhesion tests

Application Method : Manual or pneumatic caulking gun  
Application Temperature: +5 °C to +35 °C  
Clean with : White Spirit immediately after use  
Tool with : Soapy solution before skin formation  
Repair with : Seal-Flex

## Safety measures

Apply the usual industrial hygiene. Work in a well ventilated area.

## Paintability

Seal-Flex may be overpainted, however due to the large number of paints and varnishes available we strongly suggest a compability test before application. The drying time of alkyd resin based paints may increase. Due to the wide variety of possible substrates, we recommend compatability tests.

## Important note

Seal-Flex can be applied to a wide variety of substrates, except for glass, PE (polyethylene i.e. plastic films), PP (polyproylene) PTFE (teflon) and bitumious substrates. Due to specific substrates such as plastics, polycarbonate etc may differ from manufacturer to manufacturer, we recommend preliminary compatability tests.

**Note :** The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended that preliminary experiments be carried out.

# Material Safety Data Sheet

**Hazardous, NON-Dangerous Goods**

## **SECTION 1. Material and Supply Company Identification**

**Product name:** Aerobolt Seal-Flex  
**Issue date:** 22 March 2021

**Recommended use:** Sealant

**Supplier:** Aerobolt Australia Pty Ltd  
**Contact:** Jim Roustas  
**ABN:** 91 127 162 047  
**Address:** 1 / 17 Pembury Road, Minto  
NSW 2566 Australia  
**Email:** [contact@huckaerobolt.com.au](mailto:contact@huckaerobolt.com.au)

**Emergency Telephone number:** +61 2 97553747

## **SECTION 2. Hazards Identification**

This material is hazardous according to health criteria of Safe Work Australia.



### **Signal Word**

Danger

### **Hazard Classification**

Sensitisation - Respiratory - Category 1

### **Hazard Statement**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### **Prevention Precautionary Statements**

P102 Keep out of reach of children.  
P103 Read label before use.  
P261 Avoid breathing dust, fume, gas, mist, vapours or spray..  
P285 In case of inadequate ventilation wear respiratory protection.

### **Response Precautionary Statements**

P101 If medical advice is needed, have product container or label at hand.  
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

### **Storage Precautionary Statement**

Not allocated

### **Disposal Precautionary Statement**

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

**Poison Schedule:** Unknown

### **DANGEROUS GOOD CLASSIFICATION**

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

### **SECTION 3. Composition Information**

CHEMICAL ENTITY	CAS NO	PROPORTION
4,4'-methylenediphenyl diisocyanate	101-68-8	0.1 - <1 % (w/w)
Xylene	1330-20-7	0.1 - <10 % (w/w)
Ethylbenzene	100-41-4	0.1 - <5 % (w/w)
Ingredients determined to be Non-Hazardous		Balance % (w/w)
		<hr/> 100%

### **SECTION 4. First Aid Measures**

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Effects may be delayed. Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

**Skin Contact:** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

**Eye contact:** If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**PPE for First Aiders:** Wear gloves, apron, safety glasses, dust mask. Available information suggests that gloves made from should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or reusing.

**Notes to physician:** Treat symptomatically. Effects may be delayed.

## **SECTION 5. Fire Fighting Measures**

**Hazchem Code:** Not applicable.

**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards:** Non-combustible material.

**Fire-fighting further advice:** Not applicable.

## **SECTION 6. Accidental Release Measures**

### **SMALL SPILLS**

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

### **LARGE SPILLS**

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Dangerous Goods - Initial Emergency Response Guide No:** Not applicable

## **SECTION 7. Handling and Storage**

**Handling:** Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

## **SECTION 8. Exposure Controls / Personal Protection**

**National occupational exposure limits:**

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Ethyl benzene	100	434	125	543	-
Methylene bisphenyl isocyanate (MDI)	80	350	150	655	
Xylene					

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday. These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be

kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

**Engineering Measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

**Personal Protection Equipment:** GLOVES, APRON, SAFETY GLASSES, DUST MASK.

**Personal protective equipment (PPE)** must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear gloves, apron, safety glasses, dust mask. Available information suggests that gloves made from should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

## **SECTION 9. Physical and Chemical Properties**

Form:	Paste
Colour:	Variable in colour, depending on the composition
Odour:	Characteristic odour
Solubility:	organic solvents ; soluble
Specific Gravity:	1.3 ; 20 °C
Relative Vapour Density (air=1):	> 1
Vapour Pressure (20 °C):	N av
Flash Point (°C):	N av
Flammability Limits (%):	Non combustible
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N av
Boiling Point/Range (°C):	N Av
pH:	N av
Total VOC (g/Litre):	13%, 167 g/L
Explosive properties:	No chemical group associated with explosive properties
Oxidising properties:	No chemical group associated with oxidising properties

(Typical values only - consult specification sheet)

N Av = Not available, N App = Not applicable

## **SECTION 10. Stability and Reactivity**

**Chemical stability:** This material is thermally stable when stored and used as directed.

**Conditions to avoid:** Elevated temperatures and sources of ignition.

**Incompatible materials:** Oxidising agents.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

**Hazardous reactions:** No known hazardous reactions.

## **11. Toxicological Information**

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### **Acute Effects**

**Inhalation:** Material may be an irritant to mucous membranes and respiratory tract. A respiratory sensitiser. Can cause possible allergic reactions.

**Skin contact:** Contact with skin may result in irritation.

**Ingestion:** Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

### **Acute toxicity**

**Inhalation:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 5 mg/L

**Skin contact:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg bw  
**Ingestion:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg bw

**Corrosion/Irritancy:** Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.

**Sensitisation: Inhalation:** this material has been classified as a Category 1 Hazard (respiratory sensitiser). Skin: this material has been classified as not a skin sensitiser.

**Aspiration hazard:** This material has been classified as non-hazardous.

**Specific target organ toxicity (single exposure):** This material has been classified as non-hazardous.

### **Chronic Toxicity**

**Mutagenicity:** This material has been classified as non-hazardous.

**Carcinogenicity:** This material has been classified as non-hazardous.

**Reproductive toxicity (including via lactation):** This material has been classified as non-hazardous.

**Specific target organ toxicity (repeat exposure):** This material has been classified as non-hazardous.

## **SECTION 12. Ecological Information**

Avoid contaminating waterways.

**Acute aquatic hazard:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

**Long-term aquatic hazard:** This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## **SECTION 13. Disposal Considerations**

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## **SECTION 14. Transport Information**

### **ROAD AND RAIL TRANSPORT**

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

### **MARINE TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### **AIR TRANSPORT**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

## **SECTION 15. Regulatory Information**

**This material is not subject to the following international agreements:**

- Montreal Protocol (Ozone depleting substances)
- The Stockholm Convention (Persistent Organic Pollutants)
- The Rotterdam Convention (Prior Informed Consent)
- Basel Convention (Hazardous Waste)
- International Convention for the Prevention of Pollution from Ships (MARPOL)

**This material/constituent(s) is covered by the following requirements:**



- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

Reason for issue: 5 Yearly Revision

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.