

1. Identification of Substance & Company

Product

Product name	Bentoseal®
HSNO approval	HSR002603
Approval description	Lubricants (Flammable) Group Standard 2006
UN number	1133
Proper Shipping Name	Adhesives (contains Stoddard solvent)
DG class	3
Packaging group	III
Hazchem code	3Y
Uses	Grease

Company Details

Company	Allco Waterproofing Solutions	
Address	5 Te Kea Place	PO Box 101-903
	Albany	North Shore City
	Auckland	0745
	New Zealand	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 HSR002603, Lubricants (Flammable) Group Standard 2006), and is classified as follows:

Classes

3.1C
6.3B
9.1C

Hazard Statements

H226 - Flammable liquid and vapour.
H316 - Causes mild skin irritation.
H412 - Harmful to aquatic life with long lasting effects.

SYMBOLS

WARNING



Other Classifications

This mixture contains crystalline silica (quartz). The following classification ONLY applies to this substance if it is in the form of a fine respirable dust in an occupational (chronic exposure) setting, e.g. if it has been dried:

6.7A May cause cancer
6.9A Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

Read label before use.
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.
Avoid release to the environment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.
Store in a well-ventilated place. Keep cool.

3. Composition/ Information on Ingredients

Component	CASI Identification	Cone(%)
Stoddard solvent	8052-41-3	10-20%
Quartz (SiO ₂)	14808-60-7	<1%
ingredients not contributing to HSNO classes	mixture	balance

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 by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is recommended.

Exposure

Swallowed

Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.

Eye contact

If product gets in eyes, wash material from them with running water for several minutes. If symptoms persist, seek 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 occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.

Inhaled

Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

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. Carbon dioxide, extinguishing powder, foam.

Suitable extinguishing substances:

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:

3Y

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 >500L (containers >5L), 1500L (containers ≤5L), 250L (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.

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/m³ for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Std (2013)	Ingredient	WES-TWA	WES-STEL
	Stoddard solvent	100ppm, 525mg/m ³	data unavailable
	Quartz	0.2mg/m ³ (respirable dust)	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	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if splashes are likely.
Skin	If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. Nitrile 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 an organic vapour cartridge with a dust./mist filter. 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	paste, brown to grey
Odour	solvent odour
pH	not available
Vapour pressure	5mmHg, 0.000036 hPa estimated
Viscosity	NA - paste
Boiling point	150°C (estimated)
Volatile materials	no data
Freezing/ melting point	-70°C (estimated)

Solubility	0.5% soluble in water
Specific gravity/ density	0.75g/cm ³
Flash point	46.1°C (tag closed cup)
Danger of explosion	no data
Auto-ignition temperature	232° (estimated)
Upper & lower flammable limits	UEL <6%, LEL >0.5%
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
Substance Specific Incompatibility	none known
Hazardous decomposition products	Oxides of carbon (CO ₂ and CO)
Hazardous reactions	none known

11. Toxicological Information

Summary

IF SWALLOWED: may cause irritation of the mouth and stomach.

IF IN EYES: may cause eye irritation.

IF ON SKIN: may cause skin irritation, with drying out of the skin that may cause cracking of the skin.

IF INHALED: vapours may cause coughing and throat irritation.

CHRONIC TOXICITY: the quartz contained in this mixture may be harmful in the respirable form (as a respirable dust). Dust generation is not expected from this mixture. The adverse health effects from respirable quartz exposure is silicosis, cancer, scleroderma, tuberculosis, and nephrotoxicity.

Supporting Data

Acute	Oral	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: Stoddard solvent >5000mg/kg, Quartz (SiO ₂) >5000mg/kg. This mixture is not considered an aspiration hazards.
	Dermal	No evidence of dermal toxicity.
Chronic	Inhaled	No evidence of acute inhalation toxicity.
	Eye	The mixture is not considered to be an eye irritant.
	Skin	The mixture is considered to be a skin irritant. Stoddard solvent is considered a mild skin irritant by EPA.
	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	This material does contain quartz. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC Group 1). Crystalline Silica triggers 6.7A classification (confirmed carcinogen). The carcinogenicity of silica is related to long term (e.g., 10 years) inhalation of very fine particulate (e.g., from sand blasting or dry cutting of quartz containing substrates). Carcinogenicity of silica appears linked to development of silicosis (see systematic below) followed by complications and, eventually lung cancer
	Reproductive/ Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	Crystalline silica triggers 6.9A classification if it is in the form of a fine respirable dust in an occupational (chronic exposure) setting. This is due to the development of silicosis which can occur following exposure to extremely high levels of fine silica dust. Silicosis is a type of pneumoconiosis - a disease of the lung that causes inflammation, scar tissue, lesions and fibrosis in the lung (alveolar). Symptoms include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). Silicosis can occur following prolonged exposure (e.g., 10 years) to relatively high levels of fine crystalline silica dust.
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This mixture may be harmful to aquatic organisms with long lasting effects. (Stoddard solvent)

Supporting Data

Aquatic	Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is between 10 mg/L and 100 mg/L and at least one of the components is either bioaccumulative or persistent in the aquatic environment.
Bioaccumulation	NO considered bioaccumulative.
Degradability	not readily biodegradable
Soil	Not considered ecotoxic in the soil environment.
Terrestrial vertebrate	Not harmful towards terrestrial vertebrates
Terrestrial invertebrate	No evidence to toxicity towards terrestrial invertebrates
Biocidal	Not biocidal
Environmental effect levels	No EELs are available for this mixture or ingredients

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 dangerous good for transport.

UN number:	1133	Proper shipping name:	Adhesives (Stoddard solvent)
Class(es)	3	Packing group:	III
Precautions:	Ecotoxic.	Hazchem code:	3Y

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002603, Lubricants (Flammable) Group Standard 2006.

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

Key workplace requirements are:

SOS	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	Not required.
Tracking	Not required.
Bunding & secondary containment	Required if > 1000L is stored.
Signage	Required if > 1000L is stored in any one location.
Location test certificate	Required if > 500L (containers >5L), 1500L (containers ::55L), 250L (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), stored in any one location is stored in any one location.
Fire extinguisher	If > 500L 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 HSR002603, Lubricants (Flammable) 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, 116) .
ECso	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
LDso	Lethal Dose 50% - dose which is fatal to 50% of a test population (usually rats).
LCso	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 SOS

Review

Date	Reason for review
June 2016	Not applicable - new SOS
June 2020	Update version
June 2025	Update version

Disclaimer

This SOS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SOS 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 (as summarised in the SOS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SOS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SOS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SOS author, email.info@datachem.co.nz or phone: +64 9 940 30 80.

