



Silicone Industrial Grade – All Colours

Safety Data Sheet

1. Identification of Substance & Company

Product

Product name	Silicone Industrial Grade – All Colours
Other names	Atorn Industrial Grade Silicone
Product code	60SIAC
HSNO approval	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006, HSR002670
UN number	Not assigned
Packaging group	Not applicable
Hazchem code	1T (recommended)
Poison schedule	Not applicable
Uses	High performance, UV resistant, one component neutral cure silicone sealant. This product is a neutral oxime cure silicone sealant designed for sealing lap joints in metal guttering, aluminium roofing, flashings and down pipes.

Company Details

Company	EDL Fasteners LTD
Address	70 Richard Pearse Drive Mangere, Manukau New Zealand
Telephone	+64 9 257 5536
Fax	+64 9 257 5844
Website	www.edlfast.co.nz

Emergency Telephone Number: 0800-764 766

2. Hazard Identification

Hazard Classifications

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006, HSR002670), and is classified as follows:

Classes:

6.3A skin irritant

6.4A eye irritant

SYMBOLS

WARNING



Other Classifications

There are no other classifications that are known to apply.

Hazard and Precautionary Statements

Hazard Causes eye irritation.
Causes skin irritation.

Precautionary Keep out of reach of children. Read label before use.
Wash hands thoroughly after handling.
Wear protective gloves, eye/face protection.

Upon contact with air or moisture and during curing this product gives off vapours which may cause serious damage to health by prolonged exposure through inhalation and if swallowed.

Further precautionary statements can be found in Section 4 – First Aid.



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3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (% w/w)
Alkyltris (oxime) silanes	2224-33-1 & 22984-54-9	Estimated: 3.1C, 8.3A	<3%
3-Aminopropyltriethoxysilane	919-30-2	6.1D (oral), 8.2C, 8.3A	<3%
Non hazardous ingredients	Proprietary	Non hazardous	Up to 100%
By-product of curing: Methyl Ethyl Ketone – oxime	96-29-7	3.1C, 6.1D, 6.3B, 6.4A, 6.5B, 6.7B, 6.9B, 9.1C, 9.2A, 9.3B	On contact with air or moisture: up to 3.7%

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

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been harmed, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

If medical advice is needed, have this MSDS, product container or label at hand. . If exposed or concerned: Get medical advice/ attention.

Recommended first aid facilities

Ready access to running water is required. Accessible eyewash is recommended. Emergency shower, hand wash, soap. CPR training, oxygen mask.

Exposure

Swallowed

IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Contact a doctor if you feel unwell.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If irritation persists, call a POISON CENTER or doctor/physician.

Skin contact

IF ON SKIN: 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

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:

There are no specific risks for fire/explosion for this chemical. It is non-combustible. Not applicable.

Suitable extinguishing substances:

Unsuitable extinguishing substances:

Unknown.

Products of combustion:

Product may decompose in a fire and produce toxic or corrosive fumes. Hazardous decomposition products include carbon oxides, silicon dioxides and traces of formaldehyde.

Protective equipment:

Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.

Hazchem code:

1T (recommended, HAZCHEM signage not required)



6. Accidental Release Measures

Containment	There is no current legal requirement for secondary containment of this product. Prevent product from entering environment.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain spill. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses.
Clean-up method	Collect product 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	Slippery when spilt. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapour. 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 in a cool, dry place. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Department of Labour 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 Stds (OSH 2002)	Ingredient	WES-TWA	WES-STEL
	Alkyltris (oxime) silanes	Data unavailable	Data unavailable
	3-Aminopropyltriethoxysilane	Data unavailable	Data unavailable
	Non hazardous ingredients	Data unavailable	Data unavailable
	Methyl Ethyl Ketone – oxime	3ppm	10ppm

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 in Employment Act 1992 (HSE). 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



To protect eyes, it is recommended that goggles, safety glasses or full face mask be worn. Avoid wearing contact lenses.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves, e.g. nitrile rubber, NBR gloves. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.

Respiratory

A respirator when airborne concentrations approach the WES (section 8) should be used. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

No additional information

9. Physical & Chemical Properties

Appearance	Coloured or translucent non-flowing paste
Odour	Oxime odour
pH	Not available
Vapour pressure	Not determined
Viscosity	Not determined
Boiling point	>100°C
Volatile materials	Not applicable
Freezing / melting point	Not available
Solubility	Very low solubility in water (<1%)
Specific gravity / density	1.0 -1.4 (colour dependent)
Flash point	Non flammable
Danger of explosion	Not explosive
Auto-ignition temperature	Non flammable
Upper and lower flammable limits	Non flammable
Corrosiveness	Non corrosive to metals

10. Stability & Reactivity

Stability	This product is thermally stable when stored and used as directed.
Conditions to be avoided	None known.
Incompatible groups	None known.
Hazardous decomposition products	Hazardous decomposition products include carbon oxides, silicon dioxides and traces of formaldehyde.
Hazardous reactions	None known.



11. Toxicological Information

Summary

No specific data is available for this product. Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following toxicity:

Supporting Data

Acute	Oral	No data for mixture is available. Using LD ₅₀ 's for ingredients, the estimated LD ₅₀ (oral, rat) for the mixture is > 5,000 mg/kg. The by-product of curing Methyl ethyl ketoxime has a LD ₅₀ (oral, rat): 2300-3700mg/kg.
	Dermal	No data for mixture is available. Using LD ₅₀ 's for ingredients, the estimated LD ₅₀ (dermal, rat) for the mixture is >5,000 mg/kg. The by-product of curing Methyl ethyl ketoxime has a LD ₅₀ (dermal, rat): >1000mg/kg.
	Inhaled	No data for mixture is available. Inhalation may cause irritation to the mucous membranes and the respiratory tract. An aerosol mist of the silane/siloxane may cause lung damage if inhaled. Using LC ₅₀ 's for ingredients, the estimated LC ₅₀ (inhalation, rat) for the mixture is >5,000 ppm. The by-product of curing Methyl ethyl ketoxime has a LC ₅₀ (inhalation, rat): >4.8mg/L (4 hour).
	Eye	The uncured mixture is considered to be irritating to the eye, because some of the ingredients (Alkyltris (oxime) silanes and 3-Aminopropyltriethoxysilane), present are considered corrosive to the eye at higher concentrations. The cured sealant is not expected to cause irritation.
	Skin	The mixture is considered to be a skin irritant, because one of the ingredients (3-Aminopropyltriethoxysilane) present is considered a skin corrosive at higher concentrations. The cured sealant is not expected to cause irritation.
Chronic	Sensitisation	The uncured mixture is not considered to be a sensitizer, because none of the ingredients present in greater than 0.1% are known to be sensitizers. However upon curing the by-product methyl ethyl ketoxime is released and is considered to be a contact sensitizer. Repeated or prolonged contact with uncured product may lead to allergic contact dermatitis in sensitive individuals.
	Mutagenicity	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No data for mixture is available. No ingredient present in the uncured mixture at concentrations > 0.1% is considered a carcinogen. However upon curing the by-product methyl ethyl ketoxime is suspected to be a carcinogen.
	Reproductive / Developmental	No data for mixture is available. No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	The uncured mixture is not considered to be a target organ toxicant, because none of the ingredients present in greater than 1% are suspected to be a target organ toxicant. However upon curing the by-product methyl ethyl ketoxime is suspected to be a target organ toxicant and is classified by ERMA as 6.9B (oral and by inhalation).
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:

Supporting Data

Aquatic	No data for mixture is available. Using EC ₅₀ 's for ingredients, the estimated EC ₅₀ for the mixture is > 100 mg/L.
Bioaccumulation	Not biodegradable.
Degradability	Not applicable.
Soil	No data available for the mixture.
Terrestrial vertebrate	This product is not considered harmful to terrestrial vertebrates. No LC ₅₀ (diet) data for ingredients are available and the classification is based on the LD ₅₀ (oral) – see section



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Terrestrial invertebrate Biocidal	11 – oral toxicity. The mixture is not considered harmful to terrestrial invertebrates.	
Environmental effect levels:	Not applicable	
	Ingredients	EEL
	Alkyltris (oxime) silanes	Data unavailable
	3-Aminopropyltriethoxysilane	Data unavailable
	Non hazardous ingredients	Data unavailable
	Methyl Ethyl Ketone – oxime	Data unavailable

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). Not considered a hazardous substance for transport.

UN number:	Not assigned	Proper shipping name:	Not applicable
Class(es):	Not applicable	Packing group:	Not applicable
Precautions:	Not applicable	Hazchem code:	1T (recommended)

15. Regulatory Information

This product has been transferred to HSNO (transferred substance), ERMA approval code: Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006, HSR002670)

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

Key workplace requirements are:

MSDS	To be available within 10 minutes in workplaces storing >50kg or 50L.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Not required.
Approved handler	Not required.
Tracking	Not required.
Bundling and secondary containment	Not required.
Signage	Not required.
Test certificate	Not required.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.



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16. Other Information

Abbreviations

Approval Code	Approval Construction Products (Subsidiary Hazard) Group Standard 2006 Controls, ERMA. www.ermanz.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species).
ERMA	Environmental Risk Management 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
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	Material Safety Data Sheet (or Safety Data Sheet)
OSH	The Occupational Safety and Health Service of the Department of Labour (NZ)
UN Number	United Nations Number
WES	Workplace Exposure Standard

References

Data	Unless otherwise stated comes from the ERMA HSNO chemical classification information database (CCID) http://www.ermanz.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
ERMA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the ERMA New Zealand User Guide to the HSNO Control Regulations
WES 2002	The NZ Workplace Exposure Standards Effective from 2002, published by OSH and available on their web site – www.osh.dol.govt.nz .
Other References:	Bostik MSDS, ChemIDplus

Disclaimer

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS 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 MSDS) 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 MSDS have been estimated based on general information from the supplier (e.g., hazard, toxicological).** Full formulation details were not available. This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: **+64 9 940 30 80**.

