



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 2017, HSR002670
UN number	Not assigned
Packaging group	Not applicable
Hazchem code	NA
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

Approval
This product is not considered hazardous under the Hazardous Substances and New Organisms Act (HSNO), according to the criteria in the Hazardous substances (Minimum Degrees of Hazard) Notice 2017.

Classes	Hazard Statements
none	
SYMBOLS	

none

Other Classifications

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.

Precautionary Statements
none

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (% w/w)
Ingredients determined to be non hazardous	Proprietary	Up to 100%
By-product of curing: Methyl Ethyl Ketoxime	96-29-7	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 or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).
If medical advice is needed, have this SDS, product container or label at hand.



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Recommended first aid facilities

Ready access to running water is required. Accessible eyewash is recommended.

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. Combustible material. It can burn in a fire.

Suitable extinguishing substances:

Not applicable.

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:

NA

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.



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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 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA	WES-STEL
	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 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	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 @20°C
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

IF INHALED: Methyl Ethyl ketoxime is liberated during application and curing. Vapours may be irritant to respiratory tract and mucous membrane.

IF ON SKIN: repeated and prolonged exposure may lead to irritation. Methyl Ethyl ketoxime is a skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis. Cured sealant is not expected to be a skin irritant.

IF IN EYES: direct contact may lead to eye irritation.

IF SWALLOWED: may cause nausea, vomiting and irritation of the gastrointestinal tract. Cured sealant is not expected to be harmful if swallowed.

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
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 EPA as 6.9B (oral and by inhalation).
	Aggravation of existing conditions	None known.

12. Ecological Data

Summary

This material is not considered harmful or ecotoxic in the aquatic environment.

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	No data.
Degradability	No data.
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 11 – oral toxicity.
Terrestrial invertebrate	The mixture is not considered harmful to terrestrial invertebrates.
Biocidal	Not applicable



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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 Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority.
Contaminated packaging	Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007

There are no specific restrictions for this product (not a dangerous good).

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 is not considered hazardous under HSNO.

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

Key requirements are:

SDS	Not required (non hazardous), but best practice to have the SDS available.
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	Not required.
Certified handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Not required.
Signage	Not required.
Location compliance certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

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

ACGIH	American Conference of Governmental Industrial Hygienists
Approval Code	Approval Construction Products (Subsidiary Hazard) Group Standard 2017 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
EC₅₀	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
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 (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 Notices	www.epa.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS

Review

Date	Reason for review
December 2009	Not applicable – new SDS
October 2015	update: ERMA to EPA, OSH to Worksafe NZ, update of section 11 and 12, review of classification. Transport section.
March 2020	5 yearly update

Disclaimer

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

