

MATERIAL SAFETY DATA SHEET

SILCONE SEALANT

Section 1. Identification

Product Code : AMASC
MSDS Number : 56676
Chemical name : Not available
Recommended use : Silicone Elastomer
Importer/Company Name : Jonsa Australia Pty Ltd
Lidcombe Business Park
Unit D2, 3 – 29 Birnie Avenue
Lidcombe
NSW 2141
Contact person : Simon Booth
Phone : 1300 660 155
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Responsible Department : Product & Engineering

Section 2. Hazards identification

EMERGENCY OVERVIEW:

Form: Paste
Colour: Colourless.
Odour: Faint odour.
May cause an allergic skin reaction.

Classification of the substance or mixture : SKIN SENSITISATION - Category 1

GHS label elements

Hazard pictograms : 
Signal word : Warning
Hazard statements : May cause an allergic skin reaction.

Precautionary statements

- General** : Not applicable.
- Prevention** : Wear protective gloves.
Avoid breathing dust.
Contaminated work clothing should not be allowed out of the workplace.
- Response** : **IF ON SKIN:**
Wash with plenty of soap and water.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs:
Get medical attention.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Physical/chemical hazards** : Not applicable.
- Human health hazards** : May cause an allergic skin reaction.
- Environmental hazards** : Not applicable.
- Other hazards which do not result in classification** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Chemical name** : Not available

Hazardous ingredient name	% by weight	CAS number
2-Butanone, 2,2',2"-[O,O',O"-(methylsilylydyne)trioxime]	1 - 5	22984-54-9

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures**Description of necessary first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first aid personnel** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth -to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).
- Unsuitable extinguishing media** : water jet

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides
Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Recommended monitoring procedures :

Appropriate engineering controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Gas mask for organic gas if MEKO exposure limits are exceeded (3 ppm 8-hr TWA, recommended workplace exposure guideline).

Section 9. Physical and chemical properties**Appearance**

- Physical state** : Paste
- Colour** : Colourless.
- Odour** : Faint odour.
- Odour threshold** : Not available
- pH** : Not available
- Melting point** : Not applied
- Boiling point** : Not applied
- Flash point** : 81 °C (177.80 °F)
- Burning time** : Not available
- Burning rate** : Not available
- Evaporation rate** : Not available
- Flammability (solid, gas)** : Not available
- Lower and upper explosive (flammable) limits** : **Lower:** Not available
Upper: Not available
- Vapour pressure** : Not applied
- Vapour density** : Not available
- Relative density** : Not available
- Density** : 1.03 g/cm³
- Solubility** : Not available
- Solubility in water** : Insoluble
- Partition coefficient: n-** : Not available

Octanol / water**Auto-ignition temperature** : 450 °C (842.00 °F)**Decomposition temperature** : Not available**SADT** : Not available**Viscosity** : **Dynamic:** Not available**Kinematic:** Not available**Other information**

No additional information.

Section 10. Stability and reactivity

Reactivity	: Stable under normal conditions.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data moisture.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Reacts with water/moisture liberating Methyl ethyl ketoxime (MEKO) = 2-Butanone-oxime.

Section 11. Toxicological information**Information on toxicological effects****Acute toxicity****Conclusion/Summary** : Not available**Irritation/Corrosion****Conclusion/Summary****Skin** : Not available**eyes** : Not available**Respiratory** : Not available**Sensitization****Conclusion/Summary****Skin** : Not available**Respiratory** : Not available**Mutagenicity****Conclusion/Summary** : Not available**Carcinogenicity****Conclusion/Summary** : Not available**Reproductive toxicity****Conclusion/Summary** : Not available

Teratogenicity

Conclusion/Summary : Not available

Specific target organ toxicity (single exposure)

Not available

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
2-Butanone, 2,2',2''-[O,O',O''-(methylsilylidene)trioxime]	Category 2		cardiovascular system

Aspiration hazard

Not available

Information on the likely routes of exposure : Not available

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 irritation
 redness
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure**

Potential immediate effects : Not available
Potential delayed effects : Not available

Long term exposure

Potential immediate effects : Not available
Potential delayed effects : Not available

Potential chronic health effects

Conclusion/Summary : Not available

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity**Acute toxicity estimates**

Not available

Other information

- : This product will liberate methyl-ethyl-ketoxime (MEKO) on curing, contact with water or moisture in the air.

The toxicity of pure MEKO is characterized by:

Mild skin irritation, severe eye irritation, and systemic toxicity after inhalation or long term exposure. The acute inhalation 4-hr LC50 was > 4.8 mg/L.

Long-term inhalation studies (>28 days) with 2-butanone-oxime in male rats and mice showed at concentrations of 10 ppm and higher atrophy of the mucous membrane of the nose in rats and mice. This effect is most probably due to the irritating potential of 2-butanone-oxime.

Central nervous system effects (motor function, narcotic), which were reversible, when exposure is terminated, were observed at high concentrations. Acute exposure to 400 ppm in air caused effects on blood chemistry (methemoglobinemia).

MEKO has been shown to elicit skin sensitization in Guinea pigs, but no sensitization has been reported in humans.

After life long inhalation exposure to the maximum concentration of 375 ppm liver carcinomas were observed in male rats and mice. In male rats exposed to concentrations of 75 ppm benign liver tumours were observed. The lowest test concentration of 15 ppm caused no tumours.

The relevance of these tumours to humans is unknown.

Section 12. Ecological information

Ecotoxicity

Conclusion/Summary : Not available

Persistence/degradability

Conclusion/Summary : Not available

Bioaccumulative potential

Not available

Product/Ingredient name	Log Pow	BCF	Potential
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Mobility in soil

Soil/water partition coefficient (KOC) : Not available

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Waste treatment methods

Product

Methods of disposal

- : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Packaging

Methods of disposal

- : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Section 14. Transport information

*PG: Packing group

Special precautions for user

- : This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.
Keep away from foodstuffs and animal feed. Keep away from odour sensitive materials and protect from moisture.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

Section 15. Regulatory information

National regulations

The following regulations, rules or standards set forth the requirement for the use, handling, storage, transportation, classification and labelling of chemical product.

- Regulations on Safety Administration of Hazardous Chemicals
- Regulation of Safety Use Chemicals at Workplace
- Regulations on Labour Protection in Workplaces Where Toxic Products Are Used
- GB/T 16483: Safety data sheet for chemical products - Content and order of sections
- GB 15258: General rules for preparation of precautionary label for industrial chemicals
- GB 30000.2 ~ GB 30000.29: Rules for classification and labelling of chemicals
- GB 13690: General rule for classification and hazard communication of chemicals
- GB 12268: List of dangerous goods
- GB 6944: Classification and code of dangerous goods
- GB 190: Labels for packages of dangerous goods
- GB/T 15098: The principle of classification of transport packaging groups of dangerous goods
- GBZ 2.1: Occupational Exposure Limits for Hazardous Agents in the Workplace, Part 1, Chemical Hazardous Agents

Treat and dispose of the waste in compliance with the applicable environmental protection and waste disposal legislation.

China inventory (IECSC)

- : All components are listed or exempted.

International regulations

- International lists** :
- Australia inventory (AICS) All components are listed or exempted.
 - Canada inventory Not determined.
 - Japan inventory All components are listed or exempted.
 - Korea inventory All components are listed or exempted.
 - New Zealand Inventory (NZIoC) All components are listed or exempted.
 - Philippines inventory (PICCS) All components are listed or exempted.
 - United States inventory (TSCA 8b) Not determined.
 - Taiwan inventory (CSNN) All components are listed or exempted.

Section 16. Other information**History**

- Date of printing** : 20/02/2017
Date of issue/Date of revision : 20/02/2017
Date of previous issue : 20/02/2017
Version : 1.2
Prepared by : Product Safety Stewardship
Key to abbreviations :
- ATE = Acute Toxicity Estimate
 - BCF = Bioconcentration Factor
 - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 - IATA = International Air Transport Association
 - IBC = Intermediate Bulk Container
 - IMDG = International Maritime Dangerous Goods
 - LogPow = logarithm of the octanol/water partition coefficient
 - MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 - UN = United Nations
- References** : Not available

Further Information

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.