

## SAFETY DATA SHEET

## **DOW CHEMICAL (AUSTRALIA) PTY LTD**

Product name: DOWSIL™ 999A Silicone Glazing Sealant, Clear Issue Date: 11.05.2021
Print Date: 12.05.2021

DOW CHEMICAL (AUSTRALIA) PTY LTD encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product name: DOWSIL™ 999A Silicone Glazing Sealant, Clear

Recommended use of the chemical and restrictions on use

Identified uses: Adhesive, binding agents

**COMPANY IDENTIFICATION** 

DOW CHEMICAL (AUSTRALIA) PTY LTD LEVEL 29 367 COLLINS STREET MELBOURNE VIC 3000 AUSTRALIA

Customer Information Number: 1800-780-074

SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER** 

24-Hour Emergency Contact: 1800-033-882 Local Emergency Contact: 1800-033-882

For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126

**Transport Emergency Only Dial** 000

## SECTION 2: HAZARD(S) IDENTIFICATION

#### **GHS Classification**

Not classified as hazardous according to the criteria of the Work Health and Safety Regulations, Australia.

#### **GHS** label elements

## **Precautionary statements**

#### Prevention

Use only outdoors or in a well-ventilated area.

#### Other hazards

No data available

# SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8

This product is a mixture.

Component	CASRN	Concentration
Silicon dioxide	7631-86-9	>= 7.0 - <= 12.0 %

## **SECTION 4: FIRST AID MEASURES**

## Description of first aid measures

General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air and keep comfortable for breathing; consult a physician.

Skin contact: Wash off with plenty of water.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** Rinse mouth with water. No emergency medical treatment necessary.

#### Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

## Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate preexisting dermatitis.

## **SECTION 5: FIREFIGHTING MEASURES**

#### **Hazchem Code**

None Allocated

#### Extinguishing media

**Suitable extinguishing media:** Water spray. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media: None known...

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#### Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides. Silicon oxides.

**Unusual Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health..

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#### Advice for firefighters

**Fire Fighting Procedures:** Use water spray to cool unopened containers.. Evacuate area.. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations..

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Remove undamaged containers from fire area if it is safe to do so.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.. Use personal protective equipment..

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Wipe up or scrape up and contain for salvage or disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.

See sections: 7, 8, 11, 12 and 13.

# SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

**Precautions for safe handling:** Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied.

Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Conditions for safe storage:** Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents. Unsuitable materials for containers: None known.

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## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
Silicon dioxide	Dow IHG	TWA Respirable dust	2 mg/m3
	Dow IHG	TWA Total dust	6 mg/m3
	AU OEL	TWA Respirable dust	2 mg/m3

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material.

#### **Exposure controls**

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

#### **Individual protection measures**

**Eye/face protection:** Use safety glasses (with side shields). **Skin protection** 

Hand protection: Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Natural rubber ("latex"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:

AS/NZS 1336: Eye and face protection – Guidelines.

AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 2161: Occupational protective gloves. AS/NZS 2210: Occupational protective footwear. AS/NZS 4501: Occupational protective clothing Set

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical state paste
Color colourless
Odor acetic acid

Odor Threshold

PH

Not applicable

Melting point/range

No data available

No data available

No data available

No data available

Not applicable

Flash point

Not applicable

Not applicable

Not applicable

Evaporation Rate (Butyl Acetate

Not applicable

= 1)

Flammability (solid, gas) Not classified as a flammability hazard

Lower explosion limitNo data availableUpper explosion limitNo data availableVapor PressureNot applicableRelative Vapor Density (air = 1)No data available

Relative Density (water = 1) 1.04

Water solubility No data available Partition coefficient: n- No data available

octanol/water

Auto-ignition temperatureNo data availableDecomposition temperatureNo data availableDynamic ViscosityNot applicableKinematic ViscosityNot applicableExplosive propertiesNot explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

Molecular weightNo data availableParticle sizeNo data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

## **SECTION 10: STABILITY AND REACTIVITY**

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents.

Conditions to avoid: None known.

**Incompatible materials:** Avoid contact with oxidizing materials.

#### **Hazardous decomposition products:**

Decomposition products can include and are not limited to: Formaldehyde.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Toxicological information appears in this section when such data is available.

#### **Exposure routes**

Eye contact, Skin contact, Ingestion.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

#### Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):

LD50, > 5,000 mg/kg Estimated.

## Information for components:

#### Silicon dioxide

LD50, Rat, > 5,000 mg/kg

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):

LD50, > 2,000 mg/kg Estimated.

#### Information for components:

## Silicon dioxide

LD50, Rabbit, > 5,000 mg/kg

#### Acute inhalation toxicity

At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.

## Information for components:

#### Silicon dioxide

Maximum attainable concentration. LC50, Rat, 4 Hour, dust/mist, > 2.08 mg/l No deaths occurred at this concentration.

#### Skin corrosion/irritation

Based on information for component(s):

Prolonged exposure not likely to cause significant skin irritation.

May cause drying and flaking of the skin.

## Information for components:

## Silicon dioxide

Brief contact is essentially nonirritating to skin.

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

## Serious eye damage/eye irritation

Based on information for component(s):

May cause slight temporary eye irritation.

May cause mild eye discomfort.

## Information for components:

#### Silicon dioxide

Solid or dust may cause irritation or corneal injury due to mechanical action.

#### Sensitization

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

For respiratory sensitization:

No relevant information found.

## Information for components:

## Silicon dioxide

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

#### **Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## Information for components:

## Silicon dioxide

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

## Information for components:

#### Silicon dioxide

Based on physical properties, not likely to be an aspiration hazard.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on available data for the component(s), repeated exposures are not anticipated to cause significant adverse effects.

## Information for components:

#### Silicon dioxide

No relevant data found.

## Carcinogenicity

No relevant data found.

#### Information for components:

## Silicon dioxide

No relevant data found.

#### **Teratogenicity**

Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

#### Information for components:

#### Silicon dioxide

No relevant data found.

## Reproductive toxicity

Contains component(s) which did not interfere with reproduction in animal studies.

## Information for components:

#### Silicon dioxide

No relevant data found.

## Mutagenicity

In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity studies in animals were negative for component(s) tested.

## Information for components:

#### Silicon dioxide

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## **SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicological information appears in this section when such data is available.

#### **Ecotoxicity**

## Silicon dioxide

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Danio rerio (zebra fish), 96 Hour, 5,000 - 10,000 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 1,000 mg/l

## Acute toxicity to algae/aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 440 mg/l

#### Persistence and degradability

#### Silicon dioxide

Biodegradability: Biodegradation is not applicable.

## **Bioaccumulative potential**

#### Silicon dioxide

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.53

**Bioconcentration factor (BCF): 3.16** 

## **Mobility in Soil**

#### Silicon dioxide

Partition coefficient (Koc): 21.73

#### Results of PBT and vPvB assessment

## Silicon dioxide

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

#### Other adverse effects

#### Silicon dioxide

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER. WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section10 Regulatory Information, MSDS Section 15

Treatment and disposal methods of used packaging: Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

## **SECTION 14: TRANSPORT INFORMATION**

**ADG** 

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport Consult IMO regulations before transporting ocean bulk

Transport in bulk according to Annex I or II of MARPOL 73/78 and the

**IBC or IGC Code** 

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

**Hazchem Code** None Allocated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## **SECTION 15: REGULATORY INFORMATION**

#### **Poison Schedule**

S6

Product repackaged for public consumer use should be labelled in accordance with the current Standard for the Uniform Scheduling of Medicines and Poisons.

## **Australia Inventory of Chemical Substances (AICS)**

All ingredients in this preparation are listed in the Australian Inventory of Chemical Substances, AICS, or are exempt.

Prohibition/Licensing Requirements

There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

**Issue Date:** 11.05.2021

## **SECTION 16: ANY OTHER RELEVANT INFORMATION**

## Revision

Identification Number: 2323419 / A142 / Issue Date: 11.05.2021 / Version: 4.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
TWA	Time weighted average

## Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime

Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan): ISO - International Organisation for Standardization: KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships: n.o.s. - Not Otherwise Specified: Nch - Chilean Norm: NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

DOW CHEMICAL (AUSTRALIA) PTY LTD urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.