



SAFETY DATA SHEET

DOW CHEMICAL TAIWAN LIMITED

Product name: DOWSIL™ 991 Silicone Hi-Performance Sealant, Black

Issue Date: 2021.06.17

Print Date: 2021.06.18

DOW CHEMICAL TAIWAN LIMITED 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.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DOWSIL™ 991 Silicone Hi-Performance Sealant, Black

Other names: None

Recommended use of the chemical and restrictions on use

Identified uses: Adhesive, binding agents Construction materials and additives

COMPANY IDENTIFICATION

DOW CHEMICAL TAIWAN LIMITED
5F-2 AND 5F-3, NO. 2, SEC. 3
MINSHENG E. ROAD, ZHONGSHAN DIST.
104 TAIPEI CITY
TAIWAN

Customer Information Number:

(02) 2775-6100
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 886-49-226-0560

Local Emergency Contact: 049-226-0560

2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitisation - Category 1

GHS label elements

Hazard pictograms



Signal word: **WARNING!**

Hazard statements

May cause an allergic skin reaction.

Precautionary statements

Prevention

Avoid breathing dust, fume, gas, mist, vapours and/or spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.

Response

IF ON SKIN: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash it before reuse.

Disposal

Dispose of contents and/or container to an approved waste disposal plant.

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Properties: Silicone, Sealant

This product is a mixture.

Component	CASRN	Concentration
Unsaturated Fatty Acids treated Calcium Carbonate	Not available	>= 36.0 - <= 48.0 %
2-Butanone, O,O',O''-(methylsilyldyne)trioxime	22984-54-9	>= 2.8 - <= 5.9 %

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: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation or rash

occurs. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

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.

Protection of first-aiders

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.

5. FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable extinguishing media: None known..

Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides. Silicon oxides. Metal oxides. Nitrogen oxides (NO_x).

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

Advice for firefighters

Fire Fighting Procedures: Use water spray to cool unopened containers.. Evacuate area.. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.. 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: In the event of fire, wear self-contained breathing apparatus.. Use personal protective equipment..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all sources of ignition. Use personal protective equipment. 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. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.
See sections: 7, 8, 11, 12 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not get on skin or clothing. Avoid contact with eyes. Do not swallow. Protect from moisture. 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: Do not store in or use iron or steel containers.

8. EXPOSURE CONTROLS/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
Unsaturated Fatty Acids treated Calcium Carbonate	Dow IHG	TWA	1 mg/m3
Methyl Ethyl Ketoxime	US WEEL	TWA	10 ppm
	Further information: DSEN: Dermal Sensitization Notation		
	Dow IHG	TWA	0.15 ppm
	Further information: Skin Sensitizer		

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:

Methyl ethyl ketoxime

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.

Any type of listing among TWA, STEL, Ceiling and BEI which is missing from above Control parameters table, can be considered as no data available.

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 gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Natural rubber ("latex"). 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.

Hygiene measures: No smoking and drinking

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	paste
Color	black
Odor	characteristic
Odor Threshold	No data available
pH	Not applicable, substance/mixture is non-soluble (in water)

Melting point/range	No data available
Freezing point	No data available
Boiling point (760 mmHg)	Not applicable
Flash point	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not applicable
Flammability (solid, gas)	Not classified as a flammability hazard
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	Not applicable
Relative Vapor Density (air = 1)	No data available
Relative Density (water = 1)	1.31
Water solubility	insoluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available
Particle size	No data available

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

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: Do not expose to temperatures above 212 °F/100 °C. Exposure to moisture

Inhibitor: None

Incompatible materials: Avoid contact with oxidizing materials.

Hazardous decomposition products:

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

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:

Unsaturated Fatty Acids treated Calcium Carbonate

LD50, Rat, > 5,000 mg/kg

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

LD50, Rat, male and female, 2,463 mg/kg OECD Test Guideline 401

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:

Unsaturated Fatty Acids treated Calcium Carbonate

Based on data from similar materials LD50, > 2,000 mg/kg

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

Acute inhalation toxicity

Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

The LC50 has not been determined.

2-Butanone, O,O',O''-(methylsilyldiylidene)trioxime

The LC50 has not been determined.

Skin corrosion/irritation

Based on information for component(s):

Brief contact may cause slight skin irritation with local redness.

May cause drying and flaking of the skin.

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

For similar material(s):

Brief contact is essentially nonirritating to skin.

May cause drying and flaking of the skin.

2-Butanone, O,O',O''-(methylsilyldiylidene)trioxime

Brief contact may cause slight skin irritation with local redness.

Serious eye damage/eye irritation

Based on information for component(s):

May cause slight eye irritation.

May cause mild eye discomfort.

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

For similar material(s):

May cause slight temporary eye irritation.

Dust may irritate eyes.

2-Butanone, O,O',O''-(methylsilyldiylidene)trioxime

May cause slight eye irritation.

May cause slight corneal injury.

Sensitization

For skin sensitization:

Contains component(s) which have caused allergic skin sensitization in guinea pigs.

For respiratory sensitization:

No relevant data found.

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

For similar material(s):

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

2-Butanone, O,O',O''-(methylsilylidyne)trioxime

For skin sensitization:

Has caused 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:

Unsaturated Fatty Acids treated Calcium Carbonate

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

2-Butanone, O,O',O''-(methylsilylidyne)trioxime

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:

Unsaturated Fatty Acids treated Calcium Carbonate

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

2-Butanone, O,O',O''-(methylsilylidyne)trioxime

Based on available information, aspiration hazard could not be determined.

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)

Contains component(s) which have been reported to cause effects on the following organs in animals:
Blood

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilylidyne)trioxime

For similar material(s):

In animals, effects have been reported on the following organs:

Blood

Carcinogenicity

During use of the material, small amounts of methylethylketoxime (MEKO) will be released. Rodents exposed to chronic MEKO inhalation throughout their lifetimes showed significant increases in liver tumour rates.

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime

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:

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity

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

Information for components:

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime

For similar material(s): In animal studies, did not interfere with reproduction.

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:

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylne)trioxime

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

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

Ecotoxicity

Unsaturated Fatty Acids treated Calcium Carbonate

Acute toxicity to fish

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

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).

For similar material(s):

LC50, Fathead minnow (*Pimephales promelas*), Static, 96 Hour, 843 mg/l, OECD Test Guideline 203

For similar material(s):

LC50, *Oryzias latipes* (Japanese medaka), Static, 96 Hour, > 100 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

For similar material(s):

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 201 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

For similar material(s):

NOEC, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 2.6 mg/l, OECD Test Guideline 201

For similar material(s):

EC50, *Selenastrum capricornutum* (green algae), Static, 72 Hour, Growth rate, 16 mg/l, OECD Test Guideline 201

Toxicity to bacteria

For similar material(s):

EC50, activated sludge, 3 Hour, Respiration rates., > 390.45 mg/l, OECD Test Guideline 209

Chronic toxicity to fish

For similar material(s):

NOEC, *Oryzias latipes* (Orange-red killifish), flow-through test, 14 d, mortality, 50 mg/l

Chronic toxicity to aquatic invertebrates

For similar material(s):

NOEC, *Daphnia magna*, semi-static test, 21 d, number of offspring, > 100 mg/l

Persistence and degradability

Unsaturated Fatty Acids treated Calcium Carbonate

Biodegradability: No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiyl)trioxime

Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

10-day Window: Fail

Biodegradation: 20 - 28 %

Exposure time: 28 d

Method: OECD Test Guideline 301C or Equivalent

Bioaccumulative potential

Unsaturated Fatty Acids treated Calcium Carbonate

Bioaccumulation: No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylidyne)trioxime

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

Partition coefficient: n-octanol/water(log Pow): 1.69 Estimated by Structure-Activity Relationship (SAR).

Mobility in soil

Unsaturated Fatty Acids treated Calcium Carbonate

No relevant data found.

2-Butanone, O,O',O''-(methylsilyldiylidyne)trioxime

No relevant data found.

Results of PBT and vPvB assessment

Unsaturated Fatty Acids treated Calcium Carbonate

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

2-Butanone, O,O',O''-(methylsilyldiylidyne)trioxime

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

Unsaturated Fatty Acids treated Calcium Carbonate

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

2-Butanone, O,O',O''-(methylsilyldiylidyne)trioxime

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

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 Section 10 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.

14. TRANSPORT INFORMATION

Classification for ROAD and Rail transport:

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport

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

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

Specific transport measures and precautionary conditions: No

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.

15. REGULATORY INFORMATION

Taiwan Chemical Substance Inventory (TCSI)

All intentional components are either listed on the Inventory or exempted by regulations, or certified by vendors of their supply chemicals.

Applicable regulations in Taiwan:

Occupation Safety and Health Law

Waste Disposal Act.

Regulations on Labelling and Hazard Communication of Hazardous Chemicals

16. OTHER INFORMATION

Revision

Identification Number: 4126643 / A169 / Issue Date: 2021.06.17 / Version: 5.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

Dow IHG	Dow Industrial Hygiene Guideline
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

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; IECS - 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

Information Source and References

This SDS is prepared in Taiwan by the Product Regulatory Management group from information supplied by our parent company.

Date that the SDS was prepared: Please refer to issue date.

Organization that prepared the SDS	Company Name: Dow Chemical Taiwan Ltd
	Address/Telephone: 1.CHUNG-HSIN 1ST STREET, MIN-HSIUNG INDUSTRIAL PARK,MIN-HSIUNG, CHIA-YI HSIEN ,TAIWAN / 886-5-2918446

	/ ytsai@dow.com	
Prepared by	Title: Product Regulatory Specialist	Name: Y.P. Tsai

DOW CHEMICAL TAIWAN LIMITED 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.

TW