



SAFETY DATA SHEET

DOW CHEMICAL (NZ) LIMITED

Product name: SYLGARD™ 170 Silicone Elastomer Part A

Issue Date: 30.06.2020

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DOW CHEMICAL (NZ) 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: SYLGARD™ 170 Silicone Elastomer Part A

Recommended use of the chemical and restrictions on use

Identified uses: Electrical industry and electronics

COMPANY IDENTIFICATION

DOW CHEMICAL (NZ) LIMITED
LEVEL 8, 7 CITY ROAD
GRAFTON
1010 AUCKLAND
NEW ZEALAND

Customer Information Number:

0800-504-567

Fncust@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 0800 369 363

Local Emergency Contact: 0800 369 363

For medical advice, contact the New Zealand Poisons Information Centre: 0800 POISON (0800 764766)

Transport Emergency Only Dial 111

2. HAZARDS IDENTIFICATION

GHS Classification

NEW ZEALAND HAZARDOUS SUBSTANCES CLASSIFICATION: Classified as hazardous according to criteria in the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Notice 2017, and the Hazardous Substances (Classification) Notice 2017. Refer to Section 15 for HSNO Approval Number.

9.4: Ecotoxic to terrestrial invertebrates - Category C

GHS label elements

Hazard statements

Harmful to terrestrial invertebrates.

Precautionary statements

Prevention

Avoid release to the environment.

Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Quartz	14808-60-7	>= 40.0 - <= 51.0 %
Zinc Oxide	1314-13-2	>= 0.62 - <= 1.15 %
Polydimethylsiloxane hydroxy-terminated	70131-67-8	>= 0.046 - <= 0.88 %
Carbon black	1333-86-4	>= 0.24 - <= 0.66 %

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: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

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.

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..

Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides. Carbon oxides. Oxides of zinc..

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.. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage..

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..

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions: Do not release the product to the aquatic environment above defined regulatory levels. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). 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: Soak up with inert absorbent material. Clean up remaining materials from spill with suitable absorbent. 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.

7. HANDLING AND STORAGE

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. 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.

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
Carbon black	ACGIH	TWA Inhalable particulate matter	3 mg/m ³
	Further information: bronchitis: Bronchitis; A3: Confirmed animal carcinogen with unknown relevance to humans		

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 gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. 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 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: Wear clean, body-covering clothing.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	liquid
Color	black
Odor	slight
Odor Threshold	No data available
pH	No data available
Melting point/range	No data available
Freezing point	No data available
Boiling point (760 mmHg)	> 35 °C
Flash point	closed cup >101.1 °C
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability (solid, gas)	Not applicable
Flammability (liquids)	Ignitable (see flash point)
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	No data available
Relative Vapor Density (air = 1)	No data available
Relative Density (water = 1)	1.35
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available

Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic Viscosity	3000 mm ² /s at 25 °C
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Molecular weight	No data available
Particle size	Not applicable

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. When heated to temperatures above 180 °C (356 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required.

Conditions to avoid: None known.

Incompatible materials: Oxidizing agents

Hazardous decomposition products:

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

11. TOXICOLOGICAL INFORMATION

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

Exposure routes

Inhalation, 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. Swallowing may result in gastrointestinal irritation. May cause nausea and vomiting.

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:

Quartz

Single dose oral LD50 has not been determined.

Zinc Oxide

LD50, Rat, > 5,000 mg/kg

Polydimethylsiloxane hydroxy-terminated

Single dose oral LD50 has not been determined.

For similar material(s): LD50, Rat, > 20,720 mg/kg

Carbon black

LD50, Rat, > 8,000 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:

Quartz

The dermal LD50 has not been determined.

Zinc Oxide

The dermal LD50 has not been determined.

Polydimethylsiloxane hydroxy-terminated

For similar material(s): LD50, Rabbit, > 2,000 mg/kg No deaths occurred at this concentration.

Carbon black

LD50, Rabbit, > 3,000 mg/kg 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:

Quartz

The LC50 has not been determined.

Zinc Oxide

LC50, Rat, 4 Hour, dust/mist, > 5 mg/l No deaths occurred at this concentration.

Polydimethylsiloxane hydroxy-terminated

The LC50 has not been determined.

Carbon black

LC50, Rat, 1 Hour, dust/mist, 27 mg/l No deaths occurred at this concentration.

Skin corrosion/irritation

Based on information for component(s):
Brief contact is essentially nonirritating to skin.
May cause drying and flaking of the skin.

Information for components:

Quartz

May cause skin irritation due to mechanical abrasion.
May cause drying and flaking of the skin.

Zinc Oxide

Prolonged contact is essentially nonirritating to skin.

Polydimethylsiloxane hydroxy-terminated

Prolonged exposure not likely to cause significant skin irritation.

Carbon black

Prolonged exposure not likely to cause significant skin irritation.

Serious eye damage/eye irritation

Based on information for component(s):
May cause slight temporary eye irritation.

Information for components:

Quartz

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

Zinc Oxide

May cause slight temporary eye irritation.
Corneal injury is unlikely.

Polydimethylsiloxane hydroxy-terminated

May cause slight temporary eye irritation.
Corneal injury is unlikely.
May cause mild eye discomfort.

Carbon black

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 data found.

Information for components:

Quartz

For skin sensitization:

No relevant data found.

For respiratory sensitization:
No relevant data found.

Zinc Oxide

For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

Polydimethylsiloxane hydroxy-terminated

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

For respiratory sensitization:
No relevant data found.

Carbon black

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)

Available data are inadequate to determine single exposure specific target organ toxicity.

Information for components:

Quartz

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

Zinc Oxide

Available data are inadequate to determine single exposure specific target organ toxicity.

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

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:

Quartz

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

Zinc Oxide

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

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

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)

Contains a component(s) that is/are not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

Information for components:

Quartz

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

Kidney.

Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

Zinc Oxide

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

Respiratory tract.

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

Lung.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

Polydimethylsiloxane hydroxy-terminated

For similar material(s):

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Carbon black

Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs.

Repeated exposures to very fine dusts may cause lung injury.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

Carcinogenicity

Contains a component(s) that is/are not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

Information for components:

Quartz

Has caused cancer in humans. Has caused cancer in laboratory animals. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

Zinc Oxide

Available data are inadequate to evaluate carcinogenicity.

Polydimethylsiloxane hydroxy-terminated

For similar material(s): Did not cause cancer in long-term animal studies which used routes of exposure considered relevant to industrial handling.

Carbon black

Lung fibrosis and tumors have been observed in rats exposed to high concentrations of very fine carbon black particles for their lifetime. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Rats may be particularly susceptible to particle clearance overload, resulting in lung injury and tumors. No increases in tumors were observed in male or female mice exposed under the same conditions. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

Teratogenicity

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

Information for components:

Quartz

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

Zinc Oxide

No relevant data found.

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

No relevant data found.

Reproductive toxicity

No relevant data found.

Information for components:

Quartz

No relevant data found.

Zinc Oxide

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

No relevant data found.

Mutagenicity

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Genetic toxicity studies in animals were negative for component(s) tested.

Information for components:**Quartz**

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Zinc Oxide

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

Animal genetic toxicity studies were negative in some cases and positive in other cases. Positive findings were observed only at doses which produced significant inflammation. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

12. ECOLOGICAL INFORMATION

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

Ecotoxicity**Quartz****Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

Zinc Oxide**Acute toxicity to fish**

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 Hour, 0.14 - 1.1 mg/l

LC50, *Danio rerio* (zebra fish), 96 Hour, 1 - 10 mg/l

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), 48 Hour, 1 - 10 mg/l

Acute toxicity to algae/aquatic plants

IC50, *Selenastrum capricornutum* (green algae), 72 Hour, Growth rate, 0.136 mg/l

Toxicity to bacteria

Based on data from similar materials

EC50, 3 Hour, 5.2 mg/l, OECD Test Guideline 209

Chronic toxicity to fish

NOEC, *Danio rerio* (zebra fish), 32 d, mortality, \geq 0.540 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, *Daphnia magna* (Water flea), 21 d, number of offspring, 0.04 mg/l

Polydimethylsiloxane hydroxy-terminated**Acute toxicity to aquatic invertebrates**

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).
EC50, Daphnia magna (Water flea), 48 Hour, 493 mg/l, OECD Test Guideline 202

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 2,320 mg/l

Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

Carbon black**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, Leuciscus idus (Golden orfe), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 24 Hour, > 5,600 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

NOEC, Desmodesmus subspicatus (green algae), 72 Hour, 10,000 mg/l, OECD Test Guideline 201

Persistence and degradability**Quartz**

Biodegradability: Biodegradation is not applicable.

Zinc Oxide

Biodegradability: Biodegradability is not applicable to inorganic substances.

Polydimethylsiloxane hydroxy-terminated

Biodegradability: Chemical degradation (hydrolysis) is expected in the environment.

Carbon black

Biodegradability: Biodegradation is not applicable.

Bioaccumulative potential**Quartz**

Bioaccumulation: Partitioning from water to n-octanol is not applicable.

Zinc Oxide

Bioaccumulation: Partitioning from water to n-octanol is not applicable.

Polydimethylsiloxane hydroxy-terminated

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

Partition coefficient: n-octanol/water(log Pow): 0.63 Measured

Bioconcentration factor (BCF): < 5.8 Cyprinus carpio (Carp) Measured

Carbon black

Bioaccumulation: No relevant data found.

Mobility in Soil

Quartz

No relevant data found.

Zinc Oxide

No relevant data found.

Polydimethylsiloxane hydroxy-terminated

Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient (Koc): 130 Estimated.

Carbon black

No relevant data found.

Results of PBT and vPvB assessment

Quartz

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

Zinc Oxide

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

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

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

Other adverse effects

Quartz

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

Zinc Oxide

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

Polydimethylsiloxane hydroxy-terminated

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

Carbon black

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.

Waste handling, treatment and disposal practices must be in compliance with the New Zealand Hazardous Substances (Disposal) Notice 2017. Additional local requirements may be applicable in accordance with planning controls under the Resource Management Act. Regulations concerning waste management may vary in different locations.

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

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.

15. REGULATORY INFORMATION

New Zealand. Inventory of Chemical Substances

The hazardous components of this product are listed in the New Zealand Inventory of Chemicals (NZIoC) or the product otherwise complies with the requirements of the Hazardous Substances and New Organisms (HSNO) Act 1996.

HSNO Approval

Polymers Subsidiary Hazard Group Standard 2017

HSNO Approval Number: HSR002644

HSNO Controls

Certified handler certificate not required.

Tracking hazardous substance not required.

Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

16. OTHER INFORMATION

Revision

Identification Number: 6024326 / A156 / Issue Date: 30.06.2020 / Version: 3.0

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

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
TWA	8-hour, time-weighted average

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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

DOW CHEMICAL (NZ) 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.

NZ