

# **SAFETY DATA SHEET**

# **DOW CHEMICAL COMPANY LIMITED**

Safety Data Sheet according to Reg. (EU) No 2015/830

Product name: DOWSIL™ 799 EU Glaze and Go Sealant

White

Version: 2.0

Date of last issue: 20.10.2017

**Revision Date: 24.07.2018** 

Print Date: 25.07.2018

DOW CHEMICAL COMPANY 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.

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: DOWSIL™ 799 EU Glaze and Go Sealant White

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Adhesive, binding agents

1.3 Details of the supplier of the safety data sheet COMPANY IDENTIFICATION

DOW CHEMICAL COMPANY LIMITED STATION ROAD, BIRCH VALE, HIGH PEAK DERBYSHIRE England SK22 1BR UNITED KINGDOM

Customer Information Number:

+44 (0) 1663 746518 SDSQuestion@dow.com

**Fax:** +44 (0) 1663 746605

1.4 EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** 0031 115 694 982 **Local Emergency Contact:** 00 31 115 69 4982

# **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

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# Supplemental information

EUH210 Safety data sheet available on request.

**EUH208** Contains: 3-aminopropyltriethoxysilane. May produce an allergic reaction.

# 2.3 Other hazards

This product contains dodecamethylcyclohexasiloxane (D6) that has been identified by the Member State Committee of ECHA as fulfilling the vPvB criteria laid down in Annex XIII to Regulation (EC) No 1907/2006. See Section 12 for additional information.

Contact a poison control center.

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature: Sealant

3.2 Mixtures

This product is a mixture.

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration	Component	Classification: REGULATION (EC) No 1272/2008
CASRN 58190-57-1 EC-No. Not available Index-No.	1-57-1 4.2509 % <b>No.</b> ailable		Ethyl- tris(acetonoximo)- silane	STOT RE - 2 - H373
PBT and vPvB	substance			
CASRN 540-97-6 EC-No. 208-762-8 Index-No.	_	<= 0.2823 %	Dodecamethyl cyclohexasiloxane	Not classified

For the full text of the H-Statements mentioned in this Section, see Section 16.

# **SECTION 4: FIRST AID MEASURES**

# 4.1 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; if effects occur, consult a physician.

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**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 persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

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: No emergency medical treatment necessary.

# 4.2 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.

4.3 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.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

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

Unsuitable extinguishing media: None known.

# 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides Silicon oxides Nitrogen oxides (NOx)

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

# 5.3 Advice for firefighters

Fire Fighting Procedures: 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. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

- **6.1 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.
- **6.2 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.
- **6.3 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, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.

#### 6.4 Reference to other sections:

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

#### SECTION 7: HANDLING AND STORAGE

- **7.1 Precautions for safe handling:** Do not get on skin or clothing. Do not swallow. Avoid contact with eyes. 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. Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- **7.2 Conditions for safe storage, including any incompatibilities:** Keep in properly labelled containers. Store locked up. 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.

**7.3 Specific end use(s):** See the technical data sheet on this product for further information.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

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

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.

# **Derived No Effect Level**

Dodecamethyl cyclohexasiloxane

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# **Workers**

Acute systemic effects		Acute local effects		Long-term systemic effects		Long-term local effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
n.a.	n.a.	n.a.	6.1 mg/m3	n.a.	11 mg/m3	n.a.	1.22 mg/m3

#### **Consumers**

Acute systemic effects		Acute loc	cal effects	ects Long-term systemic effec		c effects	Long-term local effects		
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
n.a.	n.a.	1.7	n.a.	1.5	n.a.	2.7	1.7	n.a.	0.3
		mg/kg		mg/m3		mg/m3	mg/kg		mg/m3
		bw/day					bw/day		

# **Predicted No Effect Concentration**

Dodecamethyl cyclohexasiloxane

Compartment	PNEC			
Fresh water sediment	2.826 mg/kg			
Marine sediment	0.282 mg/kg			
Soil	3.336 mg/kg			
Sewage treatment plant	> 1.0 mg/l			

# 8.2 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). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

# Skin protection

Hand protection: Use chemical resistant gloves classified under Standard EN374: 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 EN 374) 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 EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief

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> contact is expected. 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.

Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 °C, meeting standard EN 14387).

# **Environmental exposure controls**

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state paste

Color in accordance with the product description

Odor characteristic **Odor Threshold** No data available Нα Not applicable Melting point/range No data available Freezing point No data available Boiling point (760 mmHg) Not applicable

Flash point closed cup > 100 °C

**Evaporation Rate (Butyl Acetate** 

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

1.02 - 1.06 Relative Density (water = 1)

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

octanol/water

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**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.

9.2 Other information

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.

# **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity: Not classified as a reactivity hazard.

**10.2 Chemical stability:** Stable under normal conditions.

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

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

10.5 Incompatible materials: Oxidizing agents

**10.6 Hazardous decomposition products:** Formaldehyde.

# SECTION 11: TOXICOLOGICAL INFORMATION

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

# 11.1 Information on toxicological effects **Acute toxicity**

# 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, Rat, > 5,000 mg/kg Estimated.

# Acute dermal toxicity

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

As product: The dermal LD50 has not been determined.

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Based on information for component(s):

LD50. Rabbit. > 2.000 mg/kg Estimated.

# 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.

#### Skin corrosion/irritation

Prolonged exposure not likely to cause significant skin irritation.

# Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Corneal injury is unlikely.

May cause mild eye discomfort.

#### Sensitization

For skin sensitization:

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

For respiratory sensitization:

No relevant information found.

# Specific Target Organ Systemic Toxicity (Single Exposure)

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

# Specific Target Organ Systemic Toxicity (Repeated Exposure)

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

Contains an additional component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

#### Carcinogenicity

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

Contains an additional component(s) that is/are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

# **Teratogenicity**

No relevant data found.

#### Reproductive toxicity

No relevant data found.

#### Mutagenicity

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Contains component(s) which were negative in animal genetic toxicity studies.

# **Aspiration Hazard**

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

#### Additional information

During curing, the product releases small amounts of acetonoxime. Liver tumors have been observed in male rats exposed to acetonoxime via drinking water. The relevance of these findings to humans is not known at this stage.

#### COMPONENTS INFLUENCING TOXICOLOGY:

# **Dodecamethyl cyclohexasiloxane**

**Acute inhalation toxicity** 

The LC50 has not been determined.

# **SECTION 12: ECOLOGICAL INFORMATION**

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

# 12.1 Toxicity

# Ethyl-tris(acetonoximo)-silane

# Acute toxicity to fish

Information taken from reference works and the literature.

Based on data from similar materials

LC50, Pimephales promelas (fathead minnow), 96 Hour, 696.76 mg/l, OECD Test Guideline 203

# Acute toxicity to aquatic invertebrates

Information taken from reference works and the literature.

Based on data from similar materials

EC50, Daphnia magna (Water flea), 48 Hour, 678.73 mg/l, OECD Test Guideline 202

# Acute toxicity to algae/aquatic plants

Information taken from reference works and the literature.

Based on data from similar materials

EC50, Selenastrum capricornutum (green algae), 72 Hour, 315.36 mg/l, OECD Test Guideline 201

Information taken from reference works and the literature.

Based on data from similar materials

NOEC, Selenastrum capricornutum (green algae), 72 Hour, 62.34 mg/l, OECD Test Guideline 201

# **Dodecamethyl cyclohexasiloxane**

# Acute toxicity to algae/aquatic plants

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 0.002 mg/l

# Chronic toxicity to aquatic invertebrates

No toxicity at the limit of solubility

NOEC, Daphnia magna (Water flea), 21 d, 0.0046 mg/l

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# 12.2 Persistence and degradability

# Ethyl-tris(acetonoximo)-silane

Biodegradability:

Based on data from similar materials Method: OECD Test Guideline 301

# **Dodecamethyl cyclohexasiloxane**

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:** 57 % Exposure time: 28 d

Method: OECD Test Guideline 301B

#### 12.3 Bioaccumulative potential

# Ethyl-tris(acetonoximo)-silane

Bioaccumulation: Vendor MSDS Other: see User-defined text for details

Partition coefficient: n-octanol/water(log Pow): 0.2

#### Dodecamethyl cyclohexasiloxane

Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater

Partition coefficient: n-octanol/water(log Pow): 8.87

# 12.4 Mobility in soil

# **Dodecamethyl cyclohexasiloxane**

Potential for mobility in soil is very high (Koc between 0 and 50).

# 12.5 Results of PBT and vPvB assessment

# Ethyl-tris(acetonoximo)-silane

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

# **Dodecamethyl cyclohexasiloxane**

Dodecamethyl cyclohexasiloxane (D6) meets the current REACh Annex XIII criteria for vPvB. However, D6 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D6 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

### 12.6 Other adverse effects

#### Ethyl-tris(acetonoximo)-silane

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

#### Dodecamethyl cyclohexasiloxane

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

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# SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Do not dump into any sewers, on the ground, or into any body of water. This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

# SECTION 14: TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

**14.1 UN number** Not applicable

**14.2 UN proper shipping name** Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 Packing group Not applicable

**14.5 Environmental hazards** Not considered environmentally hazardous based on

available data.

14.6 Special precautions for user No data available.

Classification for SEA transport (IMO-IMDG):

**14.1 UN number** Not applicable

**14.2 UN proper shipping name** Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 Packing group Not applicable

**14.5** Environmental hazards Not considered as marine pollutant based on available data.

14.6 Special precautions for user No data available.

14.7 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):

14.1 UN number Not applicable

**14.2 UN proper shipping name** Not regulated for transport

14.3 Transport hazard class(es) Not applicable
 14.4 Packing group Not applicable
 14.5 Environmental hazards Not applicable

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# **14.6** Special precautions for user No data available.

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.

# SECTION 15: REGULATORY INFORMATION

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

# REACh Regulation (EC) No 1907/2006

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH)., The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

#### Authorisation status under REACH:

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

CAS-No.: 540-97-6 Name: Dodecamethyl cyclohexasiloxane

Authorisation status: listed in the Candidate List of Substances of Very High Concern for Authorisation

Authorisation number: Not available

Sunset date: Not available

Exempted (Categories of) Uses: Not available

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: Not applicable

# 15.2 Chemical safety assessment

Not applicable

# **SECTION 16: OTHER INFORMATION**

# Full text of H-Statements referred to under sections 2 and 3.

H373 May cause damage to organs through prolonged or repeated exposure if

swallowed.

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# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

This product is not classified as dangerous according to EC criteria.

#### Revision

Identification Number: 4104142 / A279 / Issue Date: 24.07.2018 / Version: 2.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

# Legend

STOT RE Specific target organ toxicity - repeated exposure

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW CHEMICAL COMPANY 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

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