



SAFETY DATA SHEET

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER
Product number	13176
Synonyms; trade names	DC SHP50, DOW CORNING SHP 50 HYDROPHOBIC POWDER, DOWSIL SHP50, DOW CORNING GP SHP 50

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

Identified uses	Impregnation Agents Process regulator
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS@UnivarSolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	13176

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word	Warning
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DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Hazard statements	EUH208 Contains REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1). May produce an allergic reaction. H315 Causes skin irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Dust may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TRIETHOXYOCTYLSILANE >=6.0 - <=15.0%		
CAS number: 2943-75-1	EC number: 220-941-2	REACH registration number: 01-2119972313-39-XXXX
Classification Skin Irrit. 2 - H315 Aquatic Chronic 2 - H411		

METHANOL >=0.1 - <=0.15%		
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-XXXX
Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370		

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

<=0.0008%

CAS number: 55965-84-9

EC number: 611-341-5

M factor (Acute) = 10

M factor (Chronic) = 1

Classification

Acute Tox. 3 - H301

Acute Tox. 2 - H310

Acute Tox. 2 - H330

Skin Corr. 1B - H314

Eye Dam. 1 - H318

Skin Sens. 1 - H317

Aquatic Acute 1 - H400

Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Wear protective clothing as described in Section 8 of this safety data sheet.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention if any discomfort continues. Provide shower facilities near the workplace.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact	Causes skin irritation. The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	Solid particles trapped behind the eyelid may cause abrasive damage.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Specific hazards	When heated and in case of fire, toxic vapours/gases may be formed. Dust may form explosive mixture with air.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Formaldehyde Ethanol. Acetic acid. Oxides of the following substances: Carbon. Silicon. Phosphorus.
<u>5.3. Advice for firefighters</u>	
Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses. Contain and collect extinguishing water. Evacuate area.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust and contact with skin and eyes.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Avoid generation and spreading of dust. Dust may form explosive mixture with air. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid contact with skin, eyes and clothing. Avoid breathing dust. Container must be kept tightly closed when not in use. Avoid spilling. Avoid release to the environment. Observe good chemical hygiene practices. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Only store in correctly labelled containers. Store away from the following materials: Strong oxidising agents.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

METHANOL

Sk

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk = Can be absorbed through the skin.

WEL = Workplace Exposure Limit

Ingredient comments

Observe any occupational exposure limits for the product or ingredients.

TRIETHOXYOCTYLSILANE (CAS: 2943-75-1)

DNEL

Workers - Dermal; Short term systemic effects: 9.1 mg/kg
 Workers - Inhalation; Short term systemic effects: 16.0 mg/m³
 Workers - Dermal; Long term systemic effects: 9.1 mg/kg
 Workers - Inhalation; Long term systemic effects: 16.0 mg/m³
 Consumer - Dermal; Short term systemic effects: 6.2 mg/kg/day
 Consumer - Inhalation; Short term systemic effects: 5.4 mg/m³
 Consumer - Oral; Short term systemic effects: 6.2 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 6.2 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 5.4 mg/m³
 Consumer - Oral; Long term systemic effects: 6.2 mg/kg/day
 Consumer - Oral; Short term systemic effects: 6.2 mg/kg/day

PNEC

- Fresh water; 0.0058 mg/l
 - marine water; 0.00058 mg/l
 - Sediment (Freshwater); 0.51 mg/kg
 - Sediment (Marinewater); 0.051 mg/kg
 - Soil; 0.08 mg/kg
 - STP; >=100 mg/l

METHANOL (CAS: 67-56-1)

DNEL

Workers - Inhalation; Long term systemic effects: 260 mg/m³
 Workers - Inhalation; Short term systemic effects: 260 mg/m³
 Workers - Inhalation; Long term local effects: 260 mg/m³
 Workers - Inhalation; Short term local effects: 260 mg/m³
 Workers - Dermal; Long term systemic effects: 40 mg/m³
 Workers - Dermal; Long term systemic effects: 40 mg/kg/day
 General population - Inhalation; Long term systemic effects: 50 mg/m³
 General population - Inhalation; Short term systemic effects: 50 mg/m³
 General population - Inhalation; Long term local effects: 50 mg/m³
 General population - Inhalation; Short term local effects: 50 mg/m³
 General population - Dermal; Long term systemic effects: 8 mg/kg/day
 General population - Dermal; Short term systemic effects: 8 mg/kg/day
 General population - Oral; Long term systemic effects: 8 mg/kg/day
 General population - Oral; Short term systemic effects: 8 mg/kg/day

DMEL

Workers - Dermal; Long term systemic effects: 40 mg/kg/day

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

PNEC

- Fresh water; 20.8 mg/l
- marine water; 2.08 mg/l
- Intermittent release; 1540 mg/l
- STP; 100 mg/l
- Sediment (Freshwater); 77 mg/kg
- Sediment (Marinewater); 7.7 mg/kg
- Soil; 100 mg/kg

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1) (CAS: 55965-84-9)

PNEC

Fresh water; 0.049 µg/l
 marine water; 0.0098 µg/l
 STP; 0.045 µg/l
 Soil; 0.009 µg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Polyvinyl chloride (PVC). Neoprene. Nitrile rubber. Thickness: > 0.35 mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Combination filter, type A2/P2. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Powder.

Colour

Off-white.

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Odour	Slight.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	> 100°C Closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.61
Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	No information available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product: Strong oxidising agents. Keep at temperature not exceeding 150°C. When heated, vapours/gases hazardous to health may be formed. Formaldehyde Hazardous decomposition products will be formed at elevated temperatures.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Formaldehyde Ethanol. Acetic acid. Oxides of the following substances: Carbon. Silicon. Phosphorus.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) This product has low toxicity. Not determined. Information given is applicable to the major ingredient. LD₅₀ > 5000 mg/kg, Oral, Rat Estimated value.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not determined. Information given is applicable to the major ingredient. LD₅₀ > 2000 mg/kg, Dermal, Rabbit Calculation method.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not determined.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro Information given is applicable to the major ingredient. Negative.

Carcinogenicity

Carcinogenicity Information given is applicable to the major ingredient. No evidence of carcinogenicity in animal studies.

Reproductive toxicity

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Causes skin irritation. The product contains a small amount of sensitising substance. May cause skin sensitisation or allergic reactions in sensitive individuals.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage.

Toxicological information on ingredients.

TRIETHOXYOCTYLSILANE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,110.0

Species Rat

Notes (oral LD₅₀) LD₅₀ >5110 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,110.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 6,730.0

Species Rat

Notes (dermal LD₅₀) LD₅₀ > 6730 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 6,730.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 22 ppm, 4 hours, Vapour Rat

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation. Prolonged skin contact may cause redness and irritation.

Serious eye damage/irritation

Serious eye damage/irritation May cause temporary eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

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Skin sensitisation This information is based on test data from similar products Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No evidence of reproductive toxicity in animal studies.

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard May be harmful if swallowed and enters airways.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Causes skin irritation.

Eye contact May cause temporary eye irritation.

METHANOL

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 3.0

Species Rat

ATE inhalation (vapours mg/l) 3.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. Gene mutation: Negative.

Genotoxicity - in vivo DNA damage and/or repair: Negative. Mouse

Carcinogenicity

Carcinogenicity NOAEL 466 mg/kg/day, Oral, Rat

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development Embryotoxicity: - : , Oral, Mouse Negative. Fetotoxicity: - : , Oral, Mouse Positive.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 1 - H370

Target organs Central nervous system Eyes

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 2340 mg/kg, Oral, Monkey NOAEL 1.06 mg/l, Inhalation, Rat 90 days

Target organs Eyes Central nervous system

Aspiration hazard

Aspiration hazard No information available.

Inhalation Toxic by inhalation. Drowsiness, dizziness, disorientation, vertigo.

Ingestion Toxic if swallowed. May cause unconsciousness, blindness and possibly death.

Skin contact Toxic in contact with skin.

Eye contact May cause temporary eye irritation.

Target organs Kidneys Liver Heart & cardiovascular system

Medical considerations Liver and/or kidney damage.

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 64.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 49.6 - 75 mg/kg, Oral, Rat

ATE oral (mg/kg) 64.0

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 87.12 mg/kg)

Species Rat

Notes (dermal LD₅₀) LD₅₀ 87.12 - 141 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 87.12

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.33

Species Rat

Notes (inhalation LC₅₀) LC₅₀ 0.171 mg/l, Inhalation, Rat

ATE inhalation (dusts/mists mg/l) 0.33

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation Guinea pig: Sensitising.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Inconclusive data.

Genotoxicity - in vivo Chromosome aberration: Negative. Rat Chromosome aberration: Negative. Mouse

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEL (90d) 16.3 - 24.7 mg/kg, Oral, Rat F1
Fertility, Two-generation study - NOAEL (P) 2.8 - 4.4, (F1) 22.7 - 28, (F2) 35.7 - 39.1 mg/kg, Oral, Rat

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.
NOAEL (90 d) 16.3 - 24.7 mg/kg, Oral, Rat
NOAEL (91 d) ≤0.104 mg/kg, Dermal, Rat
NOAEL (91 d) 0.00034 mg/l, Inhalation, Rat

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Ecotoxicity Toxic to aquatic life with long lasting effects.

METHANOL

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Toxicity Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hour: > 0.055 mg/l, Oncorhynchus mykiss (Rainbow trout)
Not toxic at limit of water solubility.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 0.049 mg/l, Daphnia magna
Not toxic at limit of water solubility.

Acute toxicity - aquatic plants ErC₅₀, 72 hours: > 0.13 mg/l, Pseudokirchneriella subcapitata
Not toxic at limit of water solubility.

METHANOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
NOEC, 200 hour: 15800 mg/l, Oryzias latipes (Red killifish)
LC₅₀, 96 hour: > 100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 10000 mg/l, Daphnia magna
EC₅₀, 96 hour: 22200 - 23400 mg/l, Freshwater invertebrates
Daphnia obtusa - Neonate

EC₅₀, 48 hour: 2500 mg/l, Marinewater invertebrates
Crangon Crangon (Common sand shrimp)

Acute toxicity - aquatic plants EC₅₀, 96 hours: 22000 mg/l, Selenastrum capricornutum

EC₅₀, 96 hour: 16.912 mg/l, Marinewater algae
Ulva pertusa

Chronic, NOEC, 96 hour: 9.96 mg/l, Marinewater algae
Ulva pertusa

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Acute toxicity - microorganisms	IC ₅₀ , 15 hour: 20000 mg/l, IC ₅₀ , 3 hour: > 1000 mg/l,
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REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Acute aquatic toxicity

LE(C)₅₀ $0.01 < L(E)C50 \leq 0.1$

M factor (Acute)	10
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Acute toxicity - fish LC₅₀, 96 hour: 0.19 - 0.22 mg/l, Oncorhynchus mykiss (Rainbow trout)
OECD 203
NOEC, 36 day: 0.02 mg/l, Oncorhynchus mykiss (Rainbow trout)
NOEC, 28 day: 0.098 mg/l, Oncorhynchus mykiss (Rainbow trout)
NOEC, 14 day: 0.05 mg/l, Oncorhynchus mykiss (Rainbow trout)
OECD 210

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 0.1 - 0.16 mg/l, *Daphnia magna* OECD 202

Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 0.027- 0.048 mg/l, <i>Pseudokirchneriella subcapitata</i>
	NOEC, 72 hour: 0.0012 mg/l, <i>Pseudokirchneriella subcapitata</i>
	NOEC, 72 hour: 0.0014 mg/l, (<i>Skeletonema costatum</i>)
	OECD 201
	ErC ₅₀ , 48 hour: 0.0052 mg/l, (<i>Skeletonema costatum</i>)
	NOEC, 48 hour: 0.00049 mg/l, (<i>Skeletonema costatum</i>)

Acute toxicity - microorganisms EC₅₀, 3 hour: 7.92 mg/l, Activated sludge

Chronic aquatic toxicity

M factor (Chronic)	1
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Chronic toxicity - aquatic invertebrates NOEC, 21 day: 0.004 - 0.10 mg/l, *Daphnia magna*

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Persistence and degradability	The product is not readily biodegradable.
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Biodegradation - Degradation 31.5%: 28 days

METHANOL

Persistence and degradability	The product is readily biodegradable.
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DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Biodegradation Water - Degradation (%) 71.5: 5 days
Water - Degradation (%) 95: 20 days

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation <50%: 10 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Bioaccumulative potential BCF: > 3000,

Partition coefficient log Pow: 6.41

METHANOL

Bioaccumulative potential The product is not bioaccumulating. BCF: < 10, Leuciscus idus (Golden orfe)

Partition coefficient : -0.82 / -0.66

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Bioaccumulative potential Bioaccumulation is unlikely. BCF: 3.6, Estimated value.

Partition coefficient log Pow: -0.71 - 0.75 OECD 107

12.4. Mobility in soil

Mobility No information available.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Mobility The product hardens to a solid, immobile substance.

METHANOL

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

METHANOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

TRIETHOXYOCTYLSILANE

Other adverse effects No information available.

METHANOL

Cod 1.42

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Restrictions (Annex XVII Regulation 1907/2006)	This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 69

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

Some of the ingredients are listed or exempt.
DSL

US - TSCA

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

Some of the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

SECTION 16: Other information

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

15/10/2019

Version number

5.000

Supersedes date

30/08/2018

SDS number

13176

DOWSIL GP SHP 50 SILICONE HYDROPHOBIC POWDER

SDS status

Approved.

Hazard statements in full

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H370 Causes damage to organs .
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains REACTION MASS OF: 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE [EC NO. 247-500-7] AND 2-METHYL-2H-ISOTHIAZOL-3-ONE [EC NO. 220-239-6] (3:1). May produce an allergic reaction.

Signature

Lisa Bland