# SAFETY DATA SHEET

**DOW FRANCE S.A.S.**

Safety Data Sheet according to Reg. (EU) 2020/878

**Product name: DOWSIL™ PV 8300 Fast Cure Sealant Base**

**Revision Date:** 15.04.2021
**Version:** 1.0
**Date of last issue:** -
**Print Date:** 26.01.2023

DOW FRANCE S.A.S. 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™ PV 8300 Fast Cure Sealant Base

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
**Identified uses:** Construction materials and additives

**1.3 Details of the supplier of the safety data sheet**
**COMPANY IDENTIFICATION**
DOW FRANCE S.A.S.
23 AVENUE JULES RIMET
93210 LA PLAINE SAINT-DENIS
FRANCE

**Customer Information Number:** (31) 115 67 2626
SDSQuestion@dow.com

**1.4 EMERGENCY TELEPHONE NUMBER**
**24-Hour Emergency Contact:** 00 33 388 736 000
**Local Emergency Contact:** 00 33 388 736 000
**ORFILA:** + 33 (0)1 45 42 59 59

## 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.

**Precautionary statements**

P271 Use only outdoors or in a well-ventilated area.

**Supplemental information**
EUH210 Safety data sheet available on request.

**2.3 Other hazards**
This product contains octamethylcyclotetrasiloxane (D4) that has been identified by the Member State Committee of ECHA as fulfilling the PBT and vPvB criteria laid down in Annex XIII to Regulation (EC) No 1907/2006. See Section 12 for additional information.
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.
This product contains decamethylcyclopentasiloxane (D5) 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.

Endocrine disrupting properties
Environment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Human Health: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 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**<br>556-67-2<br>**EC-No.**<br>209-136-7<br>**Index-No.**<br>014-018-00-1 | _ | >= 0,13 - <= 0,22 % | octamethylcyclotetrasiloxane | Flam. Liq. 3; H226<br>Repr. 2; H361f<br>Aquatic Chronic 1; H410<br><br>M-Factor (Chronic aquatic toxicity): 10<br><br>Acute toxicity estimate<br>Acute oral toxicity:<br>> 4 800 mg/kg<br>Acute inhalation toxicity:<br>36 mg/l, 4 Hour, dust/mist<br>Acute dermal toxicity: |

| | | | | |
|---|---|---|---|---|
| | | | | > 2 400 mg/kg |
| PBT and vPvB substance | | | | |
| **CASRN**<br>540-97-6<br>**EC-No.**<br>208-762-8<br>**Index-No.**<br>– | _ | >= 0,24 - <= 0,34 % | Dodecamethyl cyclohexasiloxane | Not classified<br><br>Acute toxicity estimate<br>Acute oral toxicity:<br>> 2 000 mg/kg<br>Acute dermal toxicity:<br>> 2 000 mg/kg |
| **CASRN**<br>541-02-6<br>**EC-No.**<br>208-764-9<br>**Index-No.**<br>– | _ | >= 0,11 - <= 0,23 % | Decamethylcyclopentasiloxane | Not classified<br><br>Acute toxicity estimate<br>Acute oral toxicity:<br>> 24 134 mg/kg<br>Acute inhalation toxicity:<br>8,67 mg/l, 4 Hour, dust/mist<br>Acute dermal toxicity:<br>> 2 000 mg/kg |

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 and keep comfortable for breathing; consult a physician.

**Skin contact:** Wash off with plenty of water.

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

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

**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. Skin contact may aggravate preexisting dermatitis.

## 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. Metal oxides.

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

### 5.3 Advice for firefighters

**Fire Fighting Procedures:** Use water spray to cool unopened containers.. Evacuate area.. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations..
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Remove undamaged containers from fire area if it is safe to do so.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:** 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, store recovered material in appropriate container.

**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:** Avoid contact with eyes. Do not swallow. Avoid prolonged or repeated contact with skin. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied.
Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**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**:** None known.

**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.

| Component | Regulation | Type of listing | Value |
|---|---|---|---|
| octamethylcyclotetrasiloxane | US WEEL | TWA | 10 ppm |
| Decamethylcyclopentasiloxane | US WEEL | TWA | 10 ppm |

**Recommended monitoring procedures**
Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with the Occupational Exposure Limits and the adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples should be analysed by an accredited laboratory.
Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy); European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents); European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.
National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods.
Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods.
Health and Safety Executive (HSE), United Kingdom: Methods for the Determination of Hazardous Substances.
Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany.
L'Institut National de Recherche et de Securité, (INRS), France.

**Derived No Effect Level**

octamethylcyclotetrasiloxane

**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. | n.a. | n.a. | 73 mg/m3 | n.a. | 73 mg/m3 |

**Consumers**

| ***Acute systemic effects*** | | | ***Acute local effects*** | | ***Long-term systemic effects*** | | | ***Long-term local effects*** | |
|---|---|---|---|---|---|---|---|---|---|
| Dermal | Inhalation | Oral | Dermal | Inhalation | Dermal | Inhalation | Oral | Dermal | Inhalation |
| n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 13 mg/m3 | 3,7 mg/kg bw/day | n.a. | 13 mg/m3 |

Dodecamethyl cyclohexasiloxane

**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 local effects*** | | ***Long-term systemic effects*** | | | ***Long-term local effects*** | |
|---|---|---|---|---|---|---|---|---|---|
| Dermal | Inhalation | Oral | Dermal | Inhalation | Dermal | Inhalation | Oral | Dermal | Inhalation |
| n.a. | n.a. | 1,7 mg/kg bw/day | n.a. | 1,5 mg/m3 | n.a. | 2,7 mg/m3 | 1,7 mg/kg bw/day | n.a. | 0,3 mg/m3 |

Decamethylcyclopentasiloxane

**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. | 97,3 mg/m3 | n.a. | 24,2 mg/m3 | n.a. | 97,3 mg/m3 | n.a. | 24,2 mg/m3 |

**Consumers**

| ***Acute systemic effects*** | | | ***Acute local effects*** | | ***Long-term systemic effects*** | | | ***Long-term local effects*** | |
|---|---|---|---|---|---|---|---|---|---|
| Dermal | Inhalation | Oral | Dermal | Inhalation | Dermal | Inhalation | Oral | Dermal | Inhalation |
| n.a. | 17,3 mg/m3 | 5 mg/kg bw/day | n.a. | 4,3 mg/m3 | n.a. | 17,3 mg/m3 | 5 mg/kg bw/day | n.a. | 4,3 mg/m3 |

**Predicted No Effect Concentration**

octamethylcyclotetrasiloxane

| **Compartment** | **PNEC** |
|---|---|
| Fresh water | 0,0015 mg/l |

| | |
|---|---|
| Marine water | 0,00015 mg/l |
| Fresh water sediment | 3 mg/kg |
| Marine sediment | 0,3 mg/kg |
| Soil | 0,54 mg/kg |
| Sewage treatment plant | 10 mg/l |
| Oral | 41 mg/kg food |

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 |

Decamethylcyclopentasiloxane

| **Compartment** | **PNEC** |
|---|---|
| Fresh water | > 0,0012 mg/l |
| Marine water | > 0,00012 mg/l |
| Fresh water sediment | 2,4 mg/kg |
| Marine sediment | 0,24 mg/kg |
| Soil | 1,1 mg/kg |
| Sewage treatment plant | > 10 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 gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. 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 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 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:** 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.
Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 ºC, 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** | white |
| **Odor** | none |
| **pH** | Not applicable |
| **Melting point/freezing point** | |
| **Melting point/range** | not determined |
| **Freezing point** | not determined |
| **Boiling point or initial boiling point and boiling range** | |
| **Boiling point (760 mmHg)** | not determined |
| **Flash point** | **closed cup** >100 °C |
| **Flammability (solid, gas)** | Not expected to form explosive dust-air mixtures. Not classified as a flammability hazard |
| **Flammability (liquids)** | Not applicable, solid |
| **Lower explosion limit** | Not applicable, solid |
| **Upper explosion limit** | Not applicable, solid |
| **Vapor Pressure** | Not applicable |
| **Relative Vapor Density (air = 1)** | No data available |
| **Relative Density (water = 1)** | 1,34 |
| **Solubility(ies)** | |
| **Water solubility** | not determined |
| **Partition coefficient: n-octanol/water** | not determined |

| | |
|---|---|
| **Auto-ignition temperature** | No data available |
| **Decomposition temperature** | No data available |
| **Kinematic Viscosity** | >20,5 mm2/s at 40 °C |
| **Particle characteristics** | |
| **Particle size** | not determined |

**9.2 Other information**

| | |
|---|---|
| **Molecular weight** | No data available |
| **Explosive properties** | Not explosive |
| **Oxidizing properties** | The substance or mixture is not classified as oxidizing. |
| **Self-heating substances** | The substance or mixture is not classified as self heating. |

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:** None known.

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

**10.6 Hazardous decomposition products:**
Decomposition products can include and are not limited to: Formaldehyde.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Information on likely routes of exposure**
Eye contact, Skin contact, Ingestion.

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

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

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

Based on information for component(s):
LD50, Rat, > 5 000 mg/kg Estimated.

**Information for components:**

**octamethylcyclotetrasiloxane**
LD50, Rat, male, > 4 800 mg/kg No deaths occurred at this concentration.

**Dodecamethyl cyclohexasiloxane**
LD50, Rat, male and female, > 2 000 mg/kg No deaths occurred at this concentration.

**Decamethylcyclopentasiloxane**
LD50, Rat, male and female, > 24 134 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, Rabbit, > 2 000 mg/kg Estimated.

**Information for components:**

**octamethylcyclotetrasiloxane**
LD50, Rat, male and female, > 2 400 mg/kg No deaths occurred at this concentration.

**Dodecamethyl cyclohexasiloxane**
LD50, Rabbit, male and female, > 2 000 mg/kg

**Decamethylcyclopentasiloxane**
LD50, Rabbit, male and female, > 2 000 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:**

**octamethylcyclotetrasiloxane**
LC50, Rat, male and female, 4 Hour, dust/mist, 36 mg/l OECD Test Guideline 403

**Dodecamethyl cyclohexasiloxane**
The LC50 has not been determined.

**Decamethylcyclopentasiloxane**
LC50, Rat, male and female, 4 Hour, dust/mist, 8,67 mg/l

**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:**

**octamethylcyclotetrasiloxane**
Brief contact is essentially nonirritating to skin.

**Dodecamethyl cyclohexasiloxane**
Essentially nonirritating to skin.

**Decamethylcyclopentasiloxane**
Prolonged contact is essentially nonirritating to skin.

**Serious eye damage/eye irritation**
Based on information for component(s):
May cause slight temporary eye irritation.
May cause mild eye discomfort.

**Information for components:**

**octamethylcyclotetrasiloxane**
Essentially nonirritating to eyes.

**Dodecamethyl cyclohexasiloxane**
May cause slight temporary eye irritation.
Corneal injury is unlikely.

**Decamethylcyclopentasiloxane**
Essentially nonirritating to eyes.

**Sensitization**
For skin sensitization:
Contains component(s) which did not cause allergic skin sensitization in guinea pigs.
Contains component(s) which have not demonstrated the potential for contact allergy in mice.

For respiratory sensitization:
No relevant information found.

**Information for components:**

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

For respiratory sensitization:
No relevant data found.

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

For respiratory sensitization:
No relevant data found.

**Decamethylcyclopentasiloxane**

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Information for components:**

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

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

**Decamethylcyclopentasiloxane**
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:**

**octamethylcyclotetrasiloxane**
May be harmful if swallowed and enters airways.

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

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

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

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
Based on available data for the component(s), repeated exposures are not anticipated to cause significant adverse effects.

**Information for components:**

**octamethylcyclotetrasiloxane**
In animals, effects have been reported on the following organs:
Kidney.
Liver.
Respiratory tract.
Female reproductive organs.

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

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

**Carcinogenicity**
No relevant data found.

**Information for components:**

**octamethylcyclotetrasiloxane**
Results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

**Dodecamethyl cyclohexasiloxane**
No relevant data found.

**Decamethylcyclopentasiloxane**
Results from a 2 year repeated vapour inhalation exposure study to rats of decamethylcyclopentasiloxane (D5) indicate effects (uterine endometrial tumors) in female animals. This finding occurred at the highest exposure dose (160 ppm) only. Studies to date have not demonstrated if this effect occurs through a pathway that is relevant to humans.

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

**Information for components:**

**octamethylcyclotetrasiloxane**
Did not cause birth defects or any other fetal effects in laboratory animals.

**Dodecamethyl cyclohexasiloxane**
No relevant data found.

**Decamethylcyclopentasiloxane**
Did not cause birth defects or any other fetal effects in laboratory animals.

**Reproductive toxicity**
In animal studies on component(s), effects on reproduction were seen only at doses that produced significant toxicity to the parent animals. Contains component(s) which have interfered with fertility in animal studies.

**Information for components:**

**octamethylcyclotetrasiloxane**
In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. In animal studies, has been shown to interfere with fertility.

**Dodecamethyl cyclohexasiloxane**
In animal studies, did not interfere with reproduction.

**Decamethylcyclopentasiloxane**
In animal studies, did not interfere with reproduction.

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

**Information for components:**

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

**Dodecamethyl cyclohexasiloxane**
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

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

**11.2 Information on other hazards**

**Endocrine disrupting properties**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Information for components:**

**octamethylcyclotetrasiloxane**
The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**Dodecamethyl cyclohexasiloxane**
The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**Decamethylcyclopentasiloxane**
The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

## SECTION 12: ECOLOGICAL INFORMATION

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

**12.1 Toxicity**

**octamethylcyclotetrasiloxane**

**Acute toxicity to fish**

Based on testing of comparable products: The estimated maximum aqueous concentration of Octamethyl Cyclotetrasiloxane (D4) from migration to water from the product as supplied is below the D4 established no-effect threshold (< 0.0079 mg/L) for aquatic organisms.

**Chronic toxicity to aquatic invertebrates**

Based on testing for product(s) in this family of materials:
Not classified due to data which are conclusive although insufficient for classification.

**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

**Decamethylcyclopentasiloxane**

**Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.
No toxicity at the limit of solubility
LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 16 µg/l, OECD Test Guideline 204 or Equivalent

**Acute toxicity to aquatic invertebrates**

No toxicity at the limit of solubility
EC50, Daphnia magna, 48 Hour, > 2,9 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

No toxicity at the limit of solubility
ErC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, Growth rate, > 0,012 mg/l
No toxicity at the limit of solubility
NOEC, Pseudokirchneriella subcapitata (green algae), 96 Hour, Growth rate, 0,012 mg/l

**Chronic toxicity to fish**

No toxicity at the limit of solubility
LC50, Oncorhynchus mykiss (rainbow trout), 14 d, > 16 mg/l
No toxicity at the limit of solubility
NOEC, Oncorhynchus mykiss (rainbow trout), 45 d, >= 0,017 mg/l
No toxicity at the limit of solubility
NOEC, Oncorhynchus mykiss (rainbow trout), 90 d, >= 0,014 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia magna, 21 d, 0,015 mg/l

**Toxicity to soil-dwelling organisms**

This product does not have any known adverse effect on the soil organisms tested.
NOEC, Eisenia fetida (earthworms), >= 76 mg/kg

**12.2 Persistence and degradability**

**octamethylcyclotetrasiloxane**

**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Not applicable
**Biodegradation:** 3,7 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 310

**Stability in Water (1/2-life)**
Hydrolysis, DT50, 3,9 d, pH 7, Half-life Temperature 25 °C, OECD Test Guideline 111

**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:** 4,5 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301B

**Decamethylcyclopentasiloxane**
**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
10-day Window: Not applicable
**Biodegradation:** 0,14 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 310

**12.3 Bioaccumulative potential**

**octamethylcyclotetrasiloxane**
**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).
**Partition coefficient: n-octanol/water(log Pow):** 6,49 Measured
**Bioconcentration factor (BCF):** 12 400 Pimephales promelas (fathead minnow) Measured

**Dodecamethyl cyclohexasiloxane**
**Bioaccumulation:** Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).
**Partition coefficient: n-octanol/water(log Pow):** 8,87

**Decamethylcyclopentasiloxane**
**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
**Partition coefficient: n-octanol/water(log Pow):** 5,2 Measured
**Bioconcentration factor (BCF):** 2 010 Fish Estimated.

**12.4 Mobility in soil**

**octamethylcyclotetrasiloxane**
**Partition coefficient (Koc):** 16596 OECD Test Guideline 106

**Decamethylcyclopentasiloxane**
**Partition coefficient (Koc):** > 5000 Estimated.

### 12.5 Results of PBT and vPvB assessment

**octamethylcyclotetrasiloxane**

Octamethylcyclotetrasiloxane (D4) meets the current criteria for PBT and vPvB under REACh Annex XIII or other regionally specific criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 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. Decamethylcyclopentasiloxane (D5) meets the current REACh Annex XIII criteria for vPvB. However, D5 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 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.
This substance is considered to be persistent, bioaccumulating and toxic (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.

**Decamethylcyclopentasiloxane**

Decamethylcyclopentasiloxane (D5) meets the current REACh Annex XIII criteria for vPvB. However, D5 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 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. Based on an independent scientific panel of experts, the Canadian Minister of the Environment has concluded that "D5 is not entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity, or that constitute or may constitute a danger to the environment on which life depends".

### 12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**octamethylcyclotetrasiloxane**

The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**Dodecamethyl cyclohexasiloxane**

The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**Decamethylcyclopentasiloxane**

The substance is not considered to have endocrine disrupting properties according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

**12.7 Other adverse effects**

**octamethylcyclotetrasiloxane**

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.

**Decamethylcyclopentasiloxane**

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

## 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 or ID 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 considered environmentally hazardous based on available data. |
| **14.6** | **Special precautions for user** | No data available. |

**Classification for INLAND waterways (ADNR/ADN):**
**Consult your Dow contact before transporting by inland waterway**

**Classification for SEA transport (IMO-IMDG):**

| | | |
|---|---|---|
| **14.1** | **UN number or ID 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 considered as marine pollutant based on available data. |
| **14.6** | **Special precautions for user** | No data available. |
| **14.7** | **Maritime transport in bulk according to IMO instruments** | Consult IMO regulations before transporting ocean bulk |

**Classification for AIR transport (IATA/ICAO):**

| | | |
|---|---|---|
| **14.1** | **UN number or ID 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 |
| **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 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.

| | |
|---|---|
| **REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)** | Conditions of restriction for the following entries should be considered: octamethylcyclotetrasiloxane (Number on list 70) |

Decamethylcyclopentasiloxane (Number on list 70)

**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.: 556-67-2 | Name: octamethylcyclotetrasiloxane |

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

| | |
|---|---|
| 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

| | |
|---|---|
| CAS-No.: 541-02-6 | Name: Decamethylcyclopentasiloxane |

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

**Installations classified for the protection of the environment (Environment Code R511-9)**
not determined

**Occupational Illnesses (R-461-3, France):** (Not applicable)

**15.2 Chemical safety assessment**
No Chemical Safety Assessment has been carried out for this substance/mixture.

## SECTION 16: OTHER INFORMATION

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

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H361f | Suspected of damaging fertility. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**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: 99207161 / A560 / Issue Date: 15.04.2021 / Version: 1.0

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

**Legend**

| | |
|---|---|
| TWA | 8-hr TWA |
| US WEEL | USA. Workplace Environmental Exposure Levels (WEEL) |
| Aquatic Chronic | Long-term (chronic) aquatic hazard |
| Flam. Liq. | Flammable liquids |
| Repr. | Reproductive toxicity |

**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; AIIC - Australian Inventory of Industrial Chemicals; 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 FRANCE S.A.S. 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.
FR