



SAFETY DATA SHEET

THE DOW CHEMICAL COMPANY

**Product name: DOWSIL™ 375 Construction & Glass
Embedding - part A, Polyol**

Issue Date: 07/11/2023

Print Date: 12/06/2023

THE DOW CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: DOWSIL™ 375 Construction & Glass Embedding - part A, Polyol

Recommended use of the chemical and restrictions on use

Identified uses: For industrial use. Component(s) for the manufacture of urethane polymers. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

COMPANY IDENTIFICATION

THE DOW CHEMICAL COMPANY
2211 H.H. DOW WAY
MIDLAND MI 48674
UNITED STATES

Customer Information Number:

800-258-2436
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: CHEMTREC +1 800-424-9300

Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitisation - Category 1

Label elements

Hazard pictograms



Signal word: **WARNING!**

Hazards

May cause an allergic skin reaction.

Precautionary statements

Prevention

Avoid breathing mist or vapours.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

Response

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/ attention.

Wash contaminated clothing before reuse.

Disposal

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

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Limestone	1317-65-3	> 45.0 - < 70.0 %
Castor oil	8001-79-4	> 15.0 - < 40.0 %
Polyether polyol	Trade secret	> 5.0 - < 10.0 %
Zeolites	1318-02-1	> 1.0 - < 5.0 %
Fatty acids, C18-unsatd., trimers, compds. with oleylamine	147900-93-4	> 0.1 - < 1.0 %
Quartz	14808-60-7	> 0.1 - < 1.0 %
Fatty Acids, Tall-Oil, compds. with Oleylamin	85711-55-3	> 0.1 - < 1.0 %

4. FIRST AID MEASURES

Description of first aid measures

General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air and keep comfortable for breathing; consult a physician.

Skin contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation or rash occurs. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Eye contact: Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected. If effects occur, consult a physician, preferably an ophthalmologist.

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

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Water fog or fine spray.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers.. Foam.. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..

Unsuitable extinguishing media: Do not use direct water stream.. May spread fire..

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:. Carbon monoxide.. Carbon dioxide.. Silicon oxides.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation.. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids..

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry.. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed.. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles.. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container.. Do not use direct water stream. May spread fire.. Move container from fire area if this is possible without hazard.. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS..

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location.. For protective equipment in post-fire or non-fire clean-up situations, see Section 8 of the safety data sheet..

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Isolate area. Refer to section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Absorb with materials such as: Dirt. Sand. Sawdust. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. This material is hygroscopic in nature. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

Conditions for safe storage: Protect from atmospheric moisture. Store in a dry place. Avoid prolonged exposure to heat and air. Store in the following material(s): Carbon steel. Stainless steel. Polypropylene. Polyethylene-lined container. Teflon. Glass-lined container. Aluminum. Plasite 3066 lined container. Plasite 3070 lined container. 316 stainless steel. See Section 10 for more specific information.

Storage stability

Storage temperature: 15 - 25 °C (59 - 77 °F)
Storage Period: 6 Month

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Component	Regulation	Type of listing	Value
Limestone	Dow IHG	TWA	1 mg/m3
	OSHA Z-1	TWA total dust	15 mg/m3
	OSHA Z-1	TWA respirable fraction	5 mg/m3
Castor oil	OSHA Z-1	TWA mist, respirable fraction	5 mg/m3
	OSHA Z-1	TWA mist, total dust	15 mg/m3
Zeolites	ACGIH	TWA Respirable particulate matter	1 mg/m3 , Aluminium
	Further information: A4: Not classifiable as a human carcinogen		
Quartz	OSHA Z-3	TWA respirable	10 mg/m3 / %SiO2+2
	OSHA Z-3	TWA respirable	250 mppcf / %SiO2+5
	ACGIH	TWA Respirable particulate matter	0.025 mg/m3 , Silica
Further information: A2: Suspected human carcinogen			
	OSHA Z-1	TWA Respirable dust	0.05 mg/m3
	OSHA CARC	PEL respirable	0.05 mg/m3
Further information: OSHA specifically regulated carcinogen			

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). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). 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 material is heated or sprayed, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	viscous liquid to semi solid
Color	cream
Odor	characteristic
Odor Threshold	No test data available
pH	Not applicable, substance/mixture is non-polar/aprotic
Melting point/range	No test data available
Freezing point	No test data available
Boiling point (760 mmHg)	> 100 °C (> 212 °F) <i>Estimated.</i>
Flash point	closed cup >100 °C (212 °F) <i>Estimated.</i>
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	Not Applicable
Flammability (liquids)	Not expected to be a static-accumulating flammable liquid.
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	very low
Relative Vapor Density (air = 1)	No test data available
Relative Density (water = 1)	1.59 - 1.63 at 25 °C (77 °F) / 25 °C <i>ASTM D891</i>
Water solubility	Slightly soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available
Kinematic Viscosity	7300 - 14000 mm ² /s at 25 °C (77 °F) <i>ASTM D4878</i>
Explosive properties	Not explosive
Oxidizing properties	No
Molecular weight	No test data available

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

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions: Will not occur by itself.

Conditions to avoid: Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible materials: Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials.. Decomposition products can include and are not limited to:.. Carbon dioxide.. Alcohols.. Ethers.. Hydrocarbons.. Ketones.. Polymer fragments..

11. TOXICOLOGICAL INFORMATION

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

Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

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

Acute oral toxicity

Information for the Product:

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. May cause abdominal discomfort or diarrhea. May cause nausea and vomiting.

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

Based on information for component(s):
LD50, > 2,000 mg/kg Estimated.

Information for components:

Limestone

LD50, Rat, > 6,000 mg/kg

Castor oil

May cause abdominal discomfort or diarrhea. May cause nausea and vomiting. The stimulant effects of this material are reportedly strong enough to induce uterine contractions in pregnant women. LD50, Guinea pig, > 50,000 mg/kg

Polyether polyol

Typical for this family of materials. LD50, Rat, > 2,000 mg/kg Estimated. No deaths occurred at this concentration.

Zeolites

Typical for this family of materials. LD50, Rat, > 5,000 mg/kg

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Single dose oral LD50 has not been determined.

Quartz

For similar material(s): LD50, Rat, > 5,000 mg/kg

Fatty Acids, Tall-Oil, compds. with Oleylamin

LD50, Rat, female, > 2,000 mg/kg OECD Test Guideline 423 No deaths occurred at this concentration.

Acute dermal toxicity

Information for the Product:

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

As product: The dermal LD50 has not been determined.

Based on information for component(s):

LD50, > 2,000 mg/kg Estimated.

Information for components:

Limestone

LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

Castor oil

LD50, Rat, > 2,000 mg/kg

Polyether polyol

Typical for this family of materials. LD50, Rat, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

Zeolites

Typical for this family of materials. LD50, Rabbit, > 2,000 mg/kg

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

The dermal LD50 has not been determined.

Quartz

The dermal LD50 has not been determined.

Fatty Acids, Tall-Oil, compds. with Oleylamin

The dermal LD50 has not been determined.

Acute inhalation toxicity

Information for the Product:

At room temperature, exposure to vapor is minimal due to low volatility; vapor from heated material or mist may cause respiratory irritation and other effects.

As product: The LC50 has not been determined.

Information for components:

Limestone

Maximum attainable concentration. LC50, Rat, 4 Hour, dust/mist, > 3.0 mg/l No deaths occurred at this concentration.

Castor oil

The LC50 has not been determined.

Polyether polyol

The LC50 has not been determined.

Zeolites

Prolonged excessive exposure to dust may cause adverse effects. Dust may cause irritation to upper respiratory tract (nose and throat).

Typical for this family of materials. LC50, Rat, male and female, 4 Hour, dust/mist, > 3.35 mg/l No deaths occurred at this concentration.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

The LC50 has not been determined.

Quartz

The LC50 has not been determined.

Fatty Acids, Tall-Oil, compds. with Oleylamin

The LC50 has not been determined.

Skin corrosion/irritation

Information for the Product:

Based on information for component(s):
Prolonged exposure not likely to cause significant skin irritation.

Information for components:

Limestone

Essentially nonirritating to skin.
May cause drying and flaking of the skin.

Castor oil

Prolonged exposure not likely to cause significant skin irritation.

Polyether polyol

Essentially nonirritating to skin.

Zeolites

Brief contact is essentially nonirritating to skin.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Brief contact is essentially nonirritating to skin.

Quartz

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

Fatty Acids, Tall-Oil, compds. with Oleylamin

Brief contact may cause skin irritation with local redness.

Serious eye damage/eye irritation

Information for the Product:

Based on information for component(s):

May cause irritation or corneal injury due to mechanical action.

Information for components:

Limestone

May cause slight temporary eye irritation.

Dust may irritate eyes.

Castor oil

May cause slight temporary eye irritation.

Polyether polyol

May cause slight temporary eye irritation.

Corneal injury is unlikely.

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

May cause slight eye irritation.

Corneal injury is unlikely.

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

May cause severe eye irritation.

Sensitization

Information for the Product:

For skin sensitization:

A component in this mixture has been shown to be a skin sensitizer.

For respiratory sensitization:

No relevant data found.

Information for components:

Limestone

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

Castor oil

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

Polyether polyol

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

For respiratory sensitization:

No relevant data found.

Zeolites

Did not cause allergic skin reactions when tested in humans.

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

For respiratory sensitization:

No relevant data found.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Skin contact may cause an allergic skin reaction.

For respiratory sensitization:

No relevant data found.

Quartz

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

Fatty Acids, Tall-Oil, compds. with Oleylamin

Has demonstrated the potential for contact allergy in mice.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Information for the Product:

Product test data not available.

Information for components:

Limestone

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

Castor oil

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

Polyether polyol

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

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

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

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

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

Aspiration Hazard

Information for the Product:

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

Information for components:

Limestone

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

Castor oil

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

Polyether polyol

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

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

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

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

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

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

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Information for the Product:

Product test data not available.

Information for components:

Limestone

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

Castor oil

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

Polyether polyol

For similar material(s):

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

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Repeated excessive exposure may cause adverse effects.

Quartz

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

Kidney.

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

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

Gastrointestinal tract

Carcinogenicity

Information for the Product:

Product test data not available.

Information for components:

Limestone

No relevant data found.

Castor oil

Available data are inadequate to evaluate carcinogenicity.

Polyether polyol

Available data suggest that the material is unlikely to cause cancer.

Zeolites

Did not cause cancer in laboratory animals.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

No relevant data found.

Quartz

Has caused cancer in humans. Has caused cancer in laboratory animals.

Fatty Acids, Tall-Oil, compds. with Oleylamin

No relevant data found.

Carcinogenicity

Component

Quartz

List

IARC

US NTP

OSHA CARC

ACGIH

Classification

Group 1: Carcinogenic to humans

Known to be human carcinogen

OSHA specifically regulated carcinogen

A2: Suspected human carcinogen

Teratogenicity

Information for the Product:

Product test data not available.

Information for components:

Limestone

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

Castor oil

No relevant data found.

Polyether polyol

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

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

No relevant data found.

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

No relevant data found.

Reproductive toxicity

Information for the Product:

Product test data not available.

Information for components:

Limestone

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

Castor oil

In animal studies, did not interfere with reproduction.

Polyether polyol

In animal studies, a similar material has been shown not to interfere with reproduction.

Zeolites

In animal studies, did not interfere with reproduction.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

No relevant data found.

Quartz

No relevant data found.

Fatty Acids, Tall-Oil, compds. with Oleylamin

No relevant data found.

Mutagenicity

Information for the Product:

Product test data not available.

Information for components:

Limestone

In vitro genetic toxicity studies were negative.

Castor oil

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

Polyether polyol

In vitro genetic toxicity studies were negative.

Zeolites

In vitro genetic toxicity studies were negative.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

No relevant data found.

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

In vitro genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

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

Toxicity

Limestone

Acute toxicity to fish

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).
LC50, *Gambusia affinis* (Mosquito fish), static test, 96 Hour, > 56,000 mg/l

Castor oil

Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

Acute toxicity to aquatic invertebrates

Based on data from similar materials
EC50, *Daphnia magna* (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

Based on data from similar materials
NOEC, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, 100 mg/l, OECD Test Guideline 201

Based on data from similar materials

EC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, > 100 mg/l, OECD Test Guideline 201

Toxicity to bacteria

Based on data from similar materials
EC10, *Pseudomonas putida*, 30 min, 67,000 mg/l

Polyether polyol

Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For this family of materials:

LC50, Leuciscus idus (Golden orfe), semi-static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

For this family of materials:

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

For this family of materials:

EC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, > 100 mg/l, OECD Test Guideline 201 or Equivalent

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, mortality, >= 10 mg/l

Zeolites

Acute toxicity to fish

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).

LC50, Zebra fish (Danio/Brachydanio rerio), semi-static test, 96 Hour, 1,800 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 1,000 - 1,800 mg/l

Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate, 130 mg/l, OECD Test Guideline 201

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate, 18 mg/l, OECD Test Guideline 201

Toxicity to bacteria

EC50, Pseudomonas putida, 16 Hour, 1,550 mg/l

Chronic toxicity to fish

NOEC, Fathead minnow (Pimephales promelas), flow-through test, 30 d, number of offspring, > 86.7 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 32 mg/l

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Acute toxicity to fish

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

Quartz

Acute toxicity to fish

Based on information for a similar material:

Material is practically non-toxic to aquatic organisms on an acute basis
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For similar material(s):

LC50, Danio rerio (zebra fish), 96 Hour, 5,000 - 10,000 mg/l

Acute toxicity to aquatic invertebrates

For similar material(s):

EC50, Daphnia magna (Water flea), 48 Hour, 731 mg/l

For similar material(s):

EC50, Daphnia magna (Water flea), 24 Hour, > 1,000 mg/l

Acute toxicity to algae/aquatic plants

For similar material(s):

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 440 mg/l

Fatty Acids, Tall-Oil, compds. with Oleylamin

Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LL50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, > 100 mg/l, OECD Test
Guideline 203

Acute toxicity to aquatic invertebrates

EL50, Daphnia magna (Water flea), static test, 48 Hour, 15.2 mg/l, OECD Test Guideline 202

Persistence and degradability

Limestone

Biodegradability: Biodegradation is not applicable.

Castor oil

Biodegradability: For the major component(s): Biodegradation may occur under aerobic
conditions (in the presence of oxygen).

Polyether polyol

Biodegradability: For this family of materials: 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.
Material has inherent, ultimate biodegradability according to OECD test (s) guidelines
(reaches > 60 or 70% biodegradation in OECD test(s)).

10-day Window: Fail

Biodegradation: 40 %

Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

10-day Window: Not applicable

Biodegradation: 99 %

Exposure time: 28 d

Method: OECD Test Guideline 302B or Equivalent

Zeolites

Biodegradability: Biodegradation is not applicable.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Biodegradability: No relevant data found.

Quartz

Biodegradability: Biodegradation is not applicable.

Fatty Acids, Tall-Oil, compds. with Oleylamin

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

Biodegradation: 87 %

Exposure time: 28 d

Method: OECD Test Guideline 301F

Bioaccumulative potential

Limestone

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

Castor oil

Bioaccumulation: No data available for this product. For the major component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Polyether polyol

Bioaccumulation: No bioconcentration is expected because of the relatively high water solubility.

Zeolites

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

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

Partition coefficient: n-octanol/water(log Pow): 27.99

Quartz

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

Fatty Acids, Tall-Oil, compds. with Oleylamin

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 4.21 OECD Test Guideline 117

Mobility in soil

Limestone

No relevant data found.

Castor oil

For the major component(s):

Potential for mobility in soil is low (Koc between 500 and 2000).

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Polyether polyol

No relevant data found.

Zeolites

No relevant data found.

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Partition coefficient (Koc): > 5000

Quartz

No relevant data found.

Fatty Acids, Tall-Oil, compds. with Oleylamin

OECD Test Guideline 121

13. DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 1: Identified Uses. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

14. TRANSPORT INFORMATION

DOT

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

	Not regulated for transport
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Respiratory or skin sensitisation

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

United States TSCA Inventory

EPA has defined zeolites as complex chemical products consisting of silica (SiO₂) and alumina (Al₂O₃), in various proportions, plus metallic oxides and certain cations. Zeolites are considered for TSCA purposes to be statutory mixtures of the substances used to manufacture them.

Pennsylvania Worker and Community Right-To-Know Act:

The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components	CASRN
Limestone	1317-65-3
Castor oil	8001-79-4

California Prop. 65

WARNING: This product can expose you to chemicals including Quartz, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Revision

Identification Number: 99171860 / A001 / Issue Date: 07/11/2023 / Version: 2.0

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

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA CARC	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
PEL	Permissible exposure limit (PEL)
TWA	Time weighted average

Full text of other abbreviations

AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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.

THE DOW CHEMICAL COMPANY 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.

US