

# **SAFETY DATA SHEET**

#### THE DOW CHEMICAL COMPANY

Product name: SILASTIC™ 3496 Mould-Making Base

Issue Date: 05/29/2020 Print Date: 05/30/2020

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: SILASTIC™ 3496 Mould-Making Base

Recommended use of the chemical and restrictions on use

**Identified uses:** Polymer

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 29 CFR 1910.1200 Not a hazardous substance or mixture.

#### Other hazards

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone elastomer

This product is a mixture.

Component CASRN Concentration

Zircon 14940-68-2 >= 5.0 - <= 6.0 %

#### 4. FIRST AID MEASURES

# Description of first aid measures

General advice:

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.

#### 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 spray. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media: None known...

#### Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides. Silicon oxides. Sulphur oxides.

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

#### Advice for firefighters

**Fire Fighting Procedures:** Use water spray to cool unopened containers.. Evacuate area.. 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.

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**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.. Use personal protective equipment..

#### 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up:** Soak up with inert absorbent material. Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. See sections: 7, 8, 11, 12 and 13.

#### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. 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.

**Conditions for safe storage:** Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Strong oxidizing agents.

Unsuitable materials for containers: None known.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

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

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Component	Regulation	Type of listing	Value	
Zircon	OSHA Z-1	TWA	5 mg/m3 , Zirconium	
	ACGIH	TWA	5 mg/m3 , Zirconium	
	Further information: A4: No	Further information: A4: Not classifiable as a human carcinogen		
	ACGIH	STEL	10 mg/m3 , Zirconium	
	Further information: A4: No	Further information: A4: Not classifiable as a human 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). **Skin protection** 

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. 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"). 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 discomfort is experienced, 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
Color off-white
Odor slight

Odor Threshold

pH

No data available

No data available

Melting point/range

No data available

Flash point closed cup >100  $^{\circ}$ C (212  $^{\circ}$ F)

Evaporation Rate (Butyl Acetate No data available

= 1)

Flammability (solid, gas)

Flammability (liquids)

Lower explosion limit

Upper explosion limit

Vapor Pressure

Not applicable

No data available

No data available

Product name: SILASTIC™ 3496 Mould-Making Base

Relative Vapor Density (air = 1) No data available

Relative Density (water = 1) 1.15

Water solubility

Partition coefficient: n
No data available

No data available

octanol/water

Auto-ignition temperatureNo data availableDecomposition temperatureNo data availableDynamic Viscosity25,000 mPa.sKinematic ViscosityNo data availableExplosive propertiesNot explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

Molecular weightNo data availableParticle sizeNot applicable

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

# 10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapours. Safe handling conditions may be maintained by keeping vapour concentrations within the occupational exposure limit for formaldehyde.

Conditions to avoid: None known.

Incompatible materials: Oxidizing agents

#### **Hazardous decomposition products:**

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

# 11. TOXICOLOGICAL INFORMATION

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

#### Information on likely routes of exposure

Inhalation, Eye contact, Skin contact, Ingestion.

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

#### Acute oral toxicity

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

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

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

#### Information for components:

#### Zircon

Single dose oral LD50 has not been determined.

#### Acute dermal toxicity

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

As product: The dermal LD50 has not been determined.

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

#### Information for components:

### **Zircon**

The dermal LD50 has not been determined.

#### Acute inhalation toxicity

No adverse effects are anticipated from single exposure to vapor. Excessive exposure may cause irritation to upper respiratory tract (nose and throat).

As product: The LC50 has not been determined.

#### Information for components:

#### <u>Zircon</u>

The LC50 has not been determined.

### Skin corrosion/irritation

Based on information for component(s): Brief contact is essentially nonirritating to skin.

#### Information for components:

#### Zircon

Brief contact may cause skin irritation with local redness.

# Serious eye damage/eye irritation

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

# Information for components:

#### <u>Zircon</u>

May cause eye irritation.

#### Sensitization

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

Product name: SILASTIC™ 3496 Mould-Making Base

For respiratory sensitization: No relevant data found.

#### Information for components:

#### Zircon

For skin sensitization: No data available

For respiratory sensitization:

No data available

#### **Specific Target Organ Systemic Toxicity (Single Exposure)**

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

#### Information for components:

#### **Zircon**

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

#### **Aspiration Hazard**

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

#### Information for components:

#### <u>Zircon</u>

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)

No relevant data found.

#### Information for components:

#### <u>Zircon</u>

No relevant data found.

#### Carcinogenicity

No relevant data found.

#### Information for components:

# <u>Zircon</u>

No data available.

### Teratogenicity

No relevant data found.

#### Information for components:

**Zircon** 

No data available.

# Reproductive toxicity

No relevant data found.

#### Information for components:

#### Zircon

No data available.

#### Mutagenicity

Contains a component(s) which were negative in in vitro genetic toxicity studies. Genetic toxicity studies in animals were negative for component(s) tested.

#### Information for components:

#### Zircon

No data available

#### 12. ECOLOGICAL INFORMATION

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

#### **Toxicity**

#### **Zircon**

#### 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

#### Acute toxicity to algae/aquatic plants

Based on data from similar materials

NOEC, Chlorella vulgaris (Fresh water algae), 15 d, > 200 mg/l

#### Persistence and degradability

#### **Zircon**

Biodegradability: Biodegradation is not applicable.

# **Bioaccumulative potential**

#### Zircon

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

#### Mobility in soil

## **Zircon**

No relevant data found.

**Product name: SILASTIC™ 3496 Mould-Making Base** 

## 13. DISPOSAL CONSIDERATIONS

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

**Treatment and disposal methods of used packaging:** Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

### 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.

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# 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

No SARA Hazards

# 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.

#### Pennsylvania Right To Know

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

Components	CASRN
Siloxanes and silicones, dimethyl	63148-62-9
Polydimethylsiloxane hydroxy-terminated	70131-67-8
Hexamethyldisilazane reaction with Silica	68909-20-6
Zircon	14940-68-2

# California Prop. 65

WARNING: This product can expose you to chemicals including Quartz, Rutile titanium dioxide, Dimethyl siloxane reaction with silica, Benzene, which is/are known to the State of California to cause cancer, and Ethylene glycol, Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. 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.

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# 16. OTHER INFORMATION

#### **Hazard Rating System**

0/

#### NFPA

	Health	Fiammability	instability
	0	1	0
Н	MIS		
	Health	Flammability	Physical Hazard

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#### Revision

Identification Number: 4014375 / A001 / Issue Date: 05/29/2020 / Version: 8.0

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)
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air
	Contaminants

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STEL	Short-term exposure limit
TWA	8-hour, time-weighted average

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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; 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.

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