

# **SAFETY DATA SHEET**

## **DOW CHEMICAL THAILAND LTD**

Product name: SILASTIC™ RTV-3120 Mould-Making Base

**Issue Date:** 14.10.2019 **Print Date:** 15.10.2019

DOW CHEMICAL THAILAND LTD 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. PRODUCT AND COMPANY IDENTIFICATION

Product name: SILASTIC™ RTV-3120 Mould-Making Base

Recommended use of the chemical and restrictions on use

**Identified uses:** Polymer

**COMPANY IDENTIFICATION** 

DOW CHEMICAL THAILAND LTD 75 SOI SAENG CHAN-RUBIA SUKHUMVIT ROAD, PRAKANONG KLONG TOEY BANGKOK 10110 THAILAND

I HAILAND

Customer Information Number: (66)2-3657000

SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER** 

**24-Hour Emergency Contact:** (66)38-925-400 **Local Emergency Contact:** 038-925-400

## 2. HAZARDS IDENTIFICATION

#### **GHS Classification**

This product is not hazardous per the Globally Harmonized System of Classification and Labelling (GHS).

## Other hazards

No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component CASRN Concentration

Cristobalite 14464-46-1 >= 8.0 - <= 18.0 %

Quartz 14808-60-7 <= 1.125 %

## 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; if effects occur, 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: 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.

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

## Advice for firefighters

**Fire Fighting Procedures:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened

containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

**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, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

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. 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.

Component	Regulation	Type of listing	Value	
Propyl alcohol	ACGIH	TWA	100 ppm	
		Further information: URT irr: Upper Respiratory Tract irritation; eye irr: Eye irritation; A4: Not classifiable as a human carcinogen		
	TH OEL	TWA	200 ppm	

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material.

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:

Propyl alcohol

#### **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:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

**Other protection:** No precautions other than clean body-covering clothing should be needed.

**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.

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 red Odor slight

Odor ThresholdNo data availablepHNo data availableMelting point/rangeNo data availableFreezing pointNo data available

Boiling point (760 mmHg) > 65 °C

Flash point closed cup >100 °C
Evaporation Rate (Butyl Acetate No data available

= 1)

Flammability (solid, gas) Not applicable

Flammability (liquids) Ignitable (see flash point)

Lower explosion limit No data available

Upper explosion limitNo data availableVapor PressureNo data availableRelative Vapor Density (air = 1)No data available

Relative Density (water = 1) 1.48

Water solubility

No data available

Partition coefficient: n
No data available

octanol/water

Auto-ignition temperatureNo data availableDecomposition temperatureNo data availableDynamic Viscosity27,500 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 180 °C (356 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required.

Conditions to avoid: None known.

Incompatible materials: Oxidizing agents

## **Hazardous decomposition products:**

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

## 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.

Based on information for component(s):

LD50, > 5,000 mg/kg Estimated.

## Information for components:

## **Cristobalite**

Single dose oral LD50 has not been determined.

#### Quartz

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:

#### Cristobalite

The dermal LD50 has not been determined.

#### Quartz

The dermal LD50 has not been determined.

## 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:

#### Cristobalite

Vapors are unlikely due to physical properties. Dust may cause irritation of the upper respiratory tract (nose and throat) and lungs. Excessive exposure may cause lung injury.

The LC50 has not been determined.

#### <u>Quartz</u>

The LC50 has not been determined.

#### Skin corrosion/irritation

Based on information for component(s):

Prolonged exposure not likely to cause significant skin irritation.

## Information for components:

#### Cristobalite

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

#### <u>Quartz</u>

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the 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:

## **Cristobalite**

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

#### Quartz

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

#### Sensitization

For the major component(s):

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

For respiratory sensitization:

No relevant information found.

#### Information for components:

## **Cristobalite**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

#### Quartz

For skin sensitization:

No relevant data found.

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:

#### Cristobalite

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

## **Quartz**

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:

#### Cristobalite

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

#### Quartz

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)

Contains a component(s) that is/are not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

#### Information for components:

### **Cristobalite**

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

For similar material(s):

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

Kidney.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

## 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.

Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### Carcinogenicity

Contains a component(s) that is/are not expected to be bioavailable due to the physical state of the material under normal handling and processing conditions.

#### Information for components:

#### **Cristobalite**

Has caused cancer in humans. Has caused cancer in laboratory animals. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

#### Quartz

Has caused cancer in humans. Has caused cancer in laboratory animals. Due to the physical state of the material, this component is not expected to be bioavailable under normal handling and processing conditions.

## **Teratogenicity**

Based on information for component(s): Did not cause birth defects or any other fetal effects in laboratory animals.

## Information for components:

#### Cristobalite

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

#### Quartz

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

#### Reproductive toxicity

Based on information for component(s): In animal studies, did not interfere with reproduction.

## Information for components:

## Cristobalite

No relevant data found.

#### Quartz

No relevant data found.

## Mutagenicity

Contains a component(s) which were negative in in vitro genetic toxicity studies. Contains component(s) which were negative in animal genetic toxicity studies.

#### Information for components:

#### Cristobalite

For similar material(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases.

#### Quartz

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

## 12. ECOLOGICAL INFORMATION

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

## **Ecotoxicity**

#### Cristobalite

## 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

## Quartz

#### Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

## Persistence and degradability

#### Cristobalite

Biodegradability: Biodegradation is not applicable.

#### Quartz

Biodegradability: Biodegradation is not applicable.

## **Bioaccumulative potential**

#### Cristobalite

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

#### Quartz

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

## **Mobility in Soil**

#### **Cristobalite**

No relevant data found.

#### Quartz

No relevant data found.

#### Results of PBT and vPvB assessment

## **Cristobalite**

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

## Quartz

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

#### Other adverse effects

## **Cristobalite**

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

## Quartz

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

#### 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: Recycler. Reclaimer. Incinerator or other thermal destruction device.

## 14. TRANSPORT INFORMATION

#### Classification for ROAD and Rail transport:

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

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## 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

# Thailand: Notification of Department of Labour Protection and Welfare (List of Hazardous Chemicals)

All components of this product are not listed.

# Emergency Decree on Controlling the Use of Volatile Substances B.E. 2533

Not applicable

#### Hazardous Substance Act B.E. 2535

Department of Agriculture Not listed

Department of Energy Business Not listed

Department of Livestock Not listed Department of Industrial Works Not listed

Food and Drug Administration Not listed

Department of Fisheries Not listed

## 16. OTHER INFORMATION

#### Revision

Identification Number: 4107663 / A176 / Issue Date: 14.10.2019 / Version: 3.0 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)
TH OEL	Thailand. Occupational Exposure Limits
TWA	Time weighted average

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL -Domestic Substances List (Canada); 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; ERG -Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate: NOM - Official Mexican Norm: 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

DOW CHEMICAL THAILAND LTD 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.