

Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : DAP(R) 73352 SILICONE PLUS SILICONE RUBBER

**SEALANT** 

Product code : 00000000004117283

Chemical nature : Silicone, Sealant

Manufacturer or supplier's details

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road

Midland Michigan 48686

Telephone : (800) 248-2481

Emergency telephone : Product Safety : (888) 335-1331 NEWALTA : (800) 567-7455

Disposal considerations : (989) 496-6315

Recommended use of the chemical and restrictions on use

Recommended use : Adhesive, binding agents

### **SECTION 2. HAZARDS IDENTIFICATION**

### **Emergency Overview**

WARNING	
Appearance	paste
Color	colorless
Odor	slight
Hazard Summary	Sensitizer Irritant Specific Target Organ Toxicity

WHMIS Regulatory status : This product, material or substance is a WHMIS controlled

product per Sections 33 - 66, Part IV of the CPR.

**Potential Health Effects** 

Target Organs : Blood

Skin

Inhalation : No significant effects expected from a single short-term expo-

sure.

Skin : May cause allergic skin reaction.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

Eyes : Causes eye irritation.

Ingestion : No significant effects expected from a single short-term

exposure.

Chronic Exposure : Prolonged or repeated exposure may cause target organ

effects.

Aggravated Medical Condi-

tion

: None known.

Carcinogenicity:

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by ACGIH.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Silicone

Sealant

### **Hazardous ingredients**

Chemical Name	CAS-No.	Concentration (%)
Silicon dioxide	7631-86-9	>= 5 - < 10
Methyltri(ethylmethylketoxime)silane	22984-54-9	>= 1 - < 5
Vinyltri (methylethylketoxime) silane	2224-33-1	>= 1 - < 5

### **SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.

Notes to physician : Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Water spray

Alcohol-resistant foam

Dry chemical

Carbon dioxide (CO2)

Unsuitable extinguishing

media

: None known.

Specific hazards during fire

fighting

: Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

: Carbon oxides Silicon oxides

Formaldehyde

Nitrogen oxides (NOx)

Specific extinguishing meth-

ods

: Use extinguishing measures that are appropriate to local cir-

cumstances 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 fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

: Use personal protective equipment.

Follow safe handling advice and personal protective equip-

ment recommendations.

Environmental precautions : Discharge into the environment must be avoided.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

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.

Methods and materials for containment and cleaning up

: Soak up with inert absorbent material.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

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 deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not swallow. Do not get in eyes.

Handle in accordance with good industrial hygiene and safety

practice.

Keep away from water. Protect from moisture.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Silicon dioxide	7631-86-9	TWA (Res- pirable)	1.5 mg/m3	CA BC OEL
		TWA (Total)	4 mg/m3	CA BC OEL



 Version
 Revision Date:
 MSDS Number:
 Date of last issue: 11/06/2014

 1. 2
 12/05/2014
 643700-00003
 Date of first issue: 10/17/2014

TWA	10 mg/m3	CA ON OEL
TWAEV	6 mg/m3	CA QC OEL
(Respirable	_	
dust)		

### Occupational exposure limits of decomposition products

Ingredients	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
Ethyl methyl ketoxime	96-29-7	TWA	10 ppm	DCC OEL
	Further information: Skin sensitization			
		TWA	10 ppm	US WEEL

**Engineering measures** : Processing may form hazardous compounds (see section

10).

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Organic vapor Type

Hand protection

Material : Impervious gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before

breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:

Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may re-

quire added precautions.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

Color : colorless

Odor : slight

Odor Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Initial boiling point and boiling

range

: Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapor pressure : Not applicable

Relative vapor density : No data available

Relative density : 1.04

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : Not applicable

Explosive properties : Not explosive

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

Molecular weight : No data available



 Version
 Revision Date:
 MSDS Number:
 Date of last issue: 11/06/2014

 1. 2
 12/05/2014
 643700-00003
 Date of first issue: 10/17/2014

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: Use at elevated temperatures may form highly hazardous

compounds.

Can react with strong oxidizing agents.

Hazardous decomposition products will be formed upon

contact with water or humid air.

Hazardous decomposition products will be formed at elevated

temperatures.

Conditions to avoid : Exposure to moisture.

Incompatible materials : Oxidizing agents

Water

Hazardous decomposition products

Contact with water or hu-

mid air

: Ethyl methyl ketoxime

Thermal decomposition : Formaldehyde

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Acute toxicity**

Not classified based on available information.

### **Ingredients:**

Silicon dioxide:

Acute oral toxicity : LD50 (Rat): > 3,300 mg/kg

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Information taken from reference works and the

literature.

Acute inhalation toxicity : LC50 (Rat): > 2.08 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Information taken from reference works and the

literature.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Information taken from reference works and the

literature.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

Methyltri(ethylmethylketoxime)silane:

Acute oral toxicity : LD50 (Rat): > 2,520 mg/kg

Assessment: The substance or mixture has no acute oral tox-

icitv

Remarks: Based on test data

Vinyltri (methylethylketoxime) silane:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Based on test data

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on test data

Skin corrosion/irritation

Not classified based on available information.

**Ingredients:** 

Silicon dioxide:

Result: No skin irritation

Remarks: Information taken from reference works and the literature.

Methyltri(ethylmethylketoxime)silane:

Species: Rabbit

Result: No skin irritation

Remarks: Based on data from similar materials

Serious eye damage/eye irritation

Causes eye irritation.

Ingredients:

Silicon dioxide:

Result: No eye irritation

Remarks: Information taken from reference works and the literature.

Methyltri(ethylmethylketoxime)silane:

Species: Rabbit

Result: Irritation to eyes, reversing within 7 days

Remarks: Based on test data

Vinyltri (methylethylketoxime) silane:

Species: Rabbit

Result: Irreversible effects on the eye

Remarks: Based on test data

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.



 Version
 Revision Date:
 MSDS Number:
 Date of last issue: 11/06/2014

 1. 2
 12/05/2014
 643700-00003
 Date of first issue: 10/17/2014

**Ingredients:** 

Silicon dioxide:

Assessment: Does not cause skin sensitization.

Test Type: Skin: test type not specified

Species: Guinea pig

Remarks: No known sensitising effect.

Information taken from reference works and the literature.

Methyltri(ethylmethylketoxime)silane:

Assessment: Probability or evidence of skin sensitization in humans

Test Type: Maximization Test (GPMT)

Species: Guinea pig

Remarks: Causes sensitization.

Based on test data

Vinyltri (methylethylketoxime) silane:

Assessment: Probability or evidence of skin sensitization in humans

Test Type: Maximization Test (GPMT)

Species: Guinea pig

Remarks: Causes sensitization.
Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

**Ingredients:** 

Silicon dioxide:

Genotoxicity in vitro : Result: negative

Remarks: Information taken from reference works and the

literature.

Genotoxicity in vivo : Application Route: Ingestion

Result: negative

Remarks: Information taken from reference works and the

literature.

Germ cell mutagenicity- As-

sessment

: Animal testing did not show any mutagenic effects.

Methyltri(ethylmethylketoxime)silane:

Genotoxicity in vitro : Test Type: Mutagenicity (in vitro mammalian cytogenetic test)

Result: negative

Remarks: Based on test data

Vinyltri (methylethylketoxime) silane:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Remarks: Based on test data

Genotoxicity in vivo : Test Type: In vivo micronucleus test



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

Test species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Remarks: Based on test data

Germ cell mutagenicity- As-

sessment

: Animal testing did not show any mutagenic effects.

## Carcinogenicity

Not classified based on available information.

## Reproductive toxicity

Not classified based on available information.

### Ingredients:

## Methyltri(ethylmethylketoxime)silane:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fertility. Remarks: Based on test data

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat, male and female Application Route: Ingestion

Symptoms: No effects on fetal development.

Remarks: Based on test data

Reproductive toxicity - As-

sessment

: No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

### STOT-single exposure

Not classified based on available information.

## STOT-repeated exposure

Prolonged or repeated exposure may cause target organ effects.

## **Ingredients:**

## Methyltri(ethylmethylketoxime)silane:

Routes of exposure: Ingestion

Target Organs: Blood

Assessment: Shown to produce significant health effects in animals at concentrations of >10 to

100 mg/kg bw.

## Vinyltri (methylethylketoxime) silane:

Routes of exposure: Ingestion

Target Organs: Blood

Assessment: Shown to produce significant health effects in animals at concentrations of >10 to

100 mg/kg bw.



Version MSDS Number: Date of last issue: 11/06/2014 Revision Date: 1.2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

## Repeated dose toxicity

### Ingredients:

## Methyltri(ethylmethylketoxime)silane:

Species: Rat

Application Route: Ingestion Target Organs: Blood Remarks: Based on test data

## Vinyltri (methylethylketoxime) silane:

Species: Rat

Application Route: Ingestion Target Organs: Blood

Remarks: Based on data from similar materials

### **Aspiration toxicity**

Not classified based on available information.

#### **Further information**

#### **Product:**

Remarks: During use of the material, small amounts of methylethylketoxime (MEKO) will be released. Rodents exposed to chronic MEKO inhalation throughout their lifetimes showed significant increases in liver tumor rates.

## **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

## **Ingredients:**

## Methyltri(ethylmethylketoxime)silane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 120 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 120 mg/l

Exposure time: 48 h Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 94 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

**Ecotoxicology Assessment** 

Acute aquatic toxicity : This product has no known ecotoxicological effects.



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

### Persistence and degradability

## **Ingredients:**

### Methyltri(ethylmethylketoxime)silane:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 14.5 % Exposure time: 21 d

Method: OECD Test Guideline 302B

Remarks: Based on data from similar materials

### Vinyltri (methylethylketoxime) silane:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 1 s

### **Bioaccumulative potential**

## **Ingredients:**

### Methyltri(ethylmethylketoxime)silane:

Partition coefficient: n-

octanol/water

: log Pow: 11.2

### Mobility in soil

No data available

### Other adverse effects

No data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

## **Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

### **SECTION 14. TRANSPORT INFORMATION**

### International Regulation

#### **UNRTDG**

Not regulated as a dangerous good

### **IATA-DGR**

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code



Version Revision Date: MSDS Number: Date of last issue: 11/06/2014
1. 2 12/05/2014 643700-00003 Date of first issue: 10/17/2014

Not applicable for product as supplied.

**Domestic regulation** 

**TDG** 

Not regulated as a dangerous good

### **SECTION 15. REGULATORY INFORMATION**

WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

The ingredients of this product are reported in the following inventories:

NZIoC : All ingredients listed or exempt.

TSCA : All chemical substances in this material are included on or

exempted from listing on the TSCA Inventory of Chemical

Substances.

AICS : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.

ENCS/ISHL : All components are listed on ENCS/ISHL or exempted from

inventory listing.

KECI : All ingredients listed, exempt or notified.

PICCS : All ingredients listed or exempt.

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

### **Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

CA BC OEL : Canada. British Columbia OEL

CA ON OEL : Ontario Table of Occupational Exposure Limits made under

the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

DCC OEL : Dow Corning Guide



 Version
 Revision Date:
 MSDS Number:
 Date of last issue: 11/06/2014

 1. 2
 12/05/2014
 643700-00003
 Date of first issue: 10/17/2014

US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)

CA BC OEL / TWA : 8-hour time weighted average

CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV : time-weighted average exposure value

DCC OEL / TWA : Time weighted average

US WEEL / TWA : 8-hr TWA

Sources of key data used to compile the Material Safety Data Sheet

: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8