

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1 Revision Date: 01/05/2015 MSDS Number: 836459-00002 Date of last issue: 11/26/2014
Date of first issue: 11/26/2014

SECTION 1. IDENTIFICATION

Product name : SYLGARD(R) 170 SILICONE ELASTOMER (PART A)
(PART A information is below)
000000000001645170

Product code : DCC000002967

Manufacturer or supplier's details

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road
Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900
CHEMTREC : (800) 424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Electrical industry and electronics

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Silicone

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Quartz	14808-60-7	>= 30 - < 50
Carbon black	1333-86-4	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1	Revision Date: 01/05/2015	MSDS Number: 836459-00002	Date of last issue: 11/26/2014 Date of first issue: 11/26/2014
----------------	------------------------------	------------------------------	---

If inhaled	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	: Wash with water and soap as a precaution. Get medical attention if symptoms occur.
In case of eye contact	: Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	: None known.
Protection of first-aiders	: No special precautions are necessary for first aid responders.
Notes to physician	: Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Dry chemical Carbon dioxide (CO ₂)
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Silicon oxides Formaldehyde
Specific extinguishing methods	: 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 fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1	Revision Date: 01/05/2015	MSDS Number: 836459-00002	Date of last issue: 11/26/2014 Date of first issue: 11/26/2014
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SECTION 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.
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 absorbent.
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.
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 : Handle in accordance with good industrial hygiene and safety practice.
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

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1 Revision Date: 01/05/2015 MSDS Number: 836459-00002 Date of last issue: 11/26/2014
 Date of first issue: 11/26/2014

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Quartz	14808-60-7	TWA (total dust)	30 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (Respirable fraction)	0.025 mg/m ³ (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m ³ (Silica)	NIOSH REL
Carbon black	1333-86-4	TWA	3.5 mg/m ³	NIOSH REL
		TWA	3.5 mg/m ³	OSHA Z-1
		TWA (Inhalable fraction)	3 mg/m ³	ACGIH

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 : No personal respiratory protective equipment normally required.

Hand protection

Remarks : Wash hands before breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:
 Safety glasses

Skin and body protection : Skin should be washed after contact.

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 require added precautions.
 For further information regarding the use of silicones / organ-

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

ic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: black
Odor	: slight
Odor Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: > 35 °C
Flash point	: > 101.1 °C Method: closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.35
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

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

Viscosity
Viscosity, kinematic : 3,000 mm²/s

Explosive properties : Not explosive

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

Molecular weight : No data available

SECTION 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.
See OSHA formaldehyde standard, 29 CFR 1910.1048
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition products
Thermal decomposition : Formaldehyde

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Ingredients:

Quartz:
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

Carbon black:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.0046 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity**Skin corrosion/irritation**

Not classified based on available information.

Ingredients:**Carbon black:**Species: Rabbit
Result: No skin irritation**Serious eye damage/eye irritation**

Not classified based on available information.

Ingredients:**Carbon black:**Species: Rabbit
Result: No eye irritation**Respiratory or skin sensitization**Skin sensitization: Not classified based on available information.
Respiratory sensitization: Not classified based on available information.**Ingredients:****Carbon black:**Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative**Germ cell mutagenicity**

Not classified based on available information.

Ingredients:**Carbon black:**Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative**Carcinogenicity**

Not classified based on available information.

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

Ingredients:**Quartz:**

Species: Humans

Application Route: inhalation (dust/mist/fume)

Result: positive

Remarks: IARC (International Agency for Research on Cancer)

The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Carcinogenicity - Assessment : Positive evidence from human epidemiological studies (inhalation)

Carbon black:

Species: Rat

Application Route: Inhalation

Exposure time: 2 Years

Result: positive

Target Organs: Lungs

Remarks: The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Carcinogenicity - Assessment : Sufficient evidence of carcinogenicity in inhalation studies with animals

IARC

Group 1: Carcinogenic to humans

Quartz 14808-60-7

Group 2B: Possibly carcinogenic to humans

Carbon black 1333-86-4

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Known to be human carcinogen

Quartz 14808-60-7

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

Quartz:

Routes of exposure: inhalation (dust/mist/fume)

Target Organs: Lungs

Assessment: Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

Carbon black:

Routes of exposure: inhalation (dust/mist/fume)

Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

Repeated dose toxicity**Ingredients:****Quartz:**

Species: Humans

LOAEL: 0.053 mg/m³

Application Route: Inhalation

Remarks: OECD SIDS

The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Carbon black:

Species: Rat

NOAEL: 1 mg/m³LOAEL: 7 mg/m³

Application Route: Inhalation

Test atmosphere: dust/mist

Exposure time: 90 d

Remarks: The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Ingredients:****Carbon black:**

Toxicity to fish : LC0 (Danio rerio (zebra fish)): 1,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5,600 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): 10,000 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

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 handling 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

Not applicable for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1	Revision Date: 01/05/2015	MSDS Number: 836459-00002	Date of last issue: 11/26/2014 Date of first issue: 11/26/2014
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SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 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.

US State Regulations**Pennsylvania Right To Know**

Dimethyl Siloxane, Dimethylvinylsiloxo-terminated	68083-19-2	50 - 70 %
Quartz	14808-60-7	30 - 50 %
Zinc oxide	1314-13-2	0.1 - 1 %
Aluminum oxide	1344-28-1	0.1 - 1 %

New Jersey Right To Know

Dimethyl Siloxane, Dimethylvinylsiloxo-terminated	68083-19-2	50 - 70 %
Quartz	14808-60-7	30 - 50 %
Carbon black	1333-86-4	0.1 - 1 %

California Prop 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

Titanium dioxide	13463-67-7
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The ingredients of this product are reported in the following inventories:

NZIoC : All ingredients listed or exempt.

REACH : All ingredients (pre-)registered 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.

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version 1.1	Revision Date: 01/05/2015	MSDS Number: 836459-00002	Date of last issue: 11/26/2014 Date of first issue: 11/26/2014
----------------	------------------------------	------------------------------	---

IECSC : All ingredients listed or exempt.

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

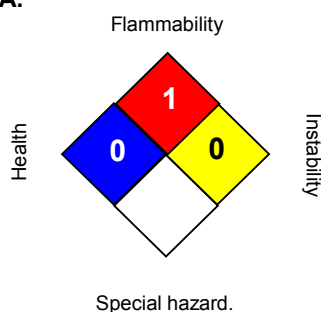
KECI : All ingredients listed, exempt or notified.

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**Further information****NFPA:****HMIS III:**

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

NIOSH REL : USA. NIOSH Recommended Exposure Limits

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

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek

SYLGARD(R) 170 SILICONE ELASTOMER (PART A) (PART A information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 11/26/2014
1.1	01/05/2015	836459-00002	Date of first issue: 11/26/2014

OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average

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 Agency, <http://echa.europa.eu/>

Revision Date : 01/05/2015

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.

US / Z8

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

SECTION 1. IDENTIFICATION

Product name : SYLGARD(R) 170 SILICONE ELASTOMER (PART B)
(PART B information is below)
00000000001645188

Product code : DCC000002974

Manufacturer or supplier's details

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road
Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900
CHEMTREC : (800) 424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Electrical industry and electronics

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Precautionary Statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. -
No smoking.
Storage:
P403 Store in a well-ventilated place.

Other hazards

May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic, or oxidizing materials.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Silicone

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version 1.1	Revision Date: 12/03/2014	MSDS Number: 691975-00002	Date of last issue: 10/31/2014 Date of first issue: 10/31/2014
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Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Quartz	14808-60-7	>= 30 - < 50

SECTION 4. FIRST AID MEASURES

- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash with water and soap as a precaution.
Get medical attention if symptoms occur.
- In case of eye contact : Flush eyes with water as a precaution.
Get medical attention if irritation develops and persists.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : No special precautions are necessary for first aid responders.
- Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Water mist
- Unsuitable extinguishing media : Dry chemical
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket.
- Hazardous combustion products : Carbon oxides
Silicon oxides
Formaldehyde
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Do not allow extinguishing medium to contact container con-

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

tents. Most fire extinguishing media will cause hydrogen evolution, and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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

Evacuate area.

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

SECTION 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.
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 absorbent.
Materials in contact with water, moisture, acids or bases have the potential to generate hydrogen gas. Recovered material should be stored in a vented container.
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.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : 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 a closed container.
Store in accordance with the particular national regulations.
Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines.
Do not repackage. Clogged container vents may increase pressure build up.
- Materials to avoid : Do not store with the following product types:
Strong oxidizing agents
- Packaging material : Unsuitable material: Do not store in or use containers except the original product package.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Quartz	14808-60-7

- 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 : No personal respiratory protective equipment normally required.

Hand protection

- Remarks : Wash hands before breaks and at the end of workday.

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

- Eye protection : Wear the following personal protective equipment:
Safety glasses
- Skin and body protection : Skin should be washed after contact.
- 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 require added precautions.
For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : off-white
- Odor : slight
- Odor Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : > 35 °C
- Flash point : > 101.1 °C
Method: closed cup
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapor pressure : No data available

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

Relative vapor density : No data available

Relative density : 1.33

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, kinematic : 2,000 mm²/s

Explosive properties : Not explosive

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

Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Contact with water liberates highly flammable gases.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Can react with strong oxidizing agents.
Product may evolve flammable hydrogen gas on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air. 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.
See OSHA formaldehyde standard, 29 CFR 1910.1048
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid : Exposure to moisture.

Incompatible materials : Oxidizing agents

Hazardous decomposition products

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version 1.1	Revision Date: 12/03/2014	MSDS Number: 691975-00002	Date of last issue: 10/31/2014 Date of first issue: 10/31/2014
----------------	------------------------------	------------------------------	---

Thermal decomposition : Formaldehyde

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Ingredients:**Quartz:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.
Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Ingredients:**Quartz:**

Species: Humans
Application Route: inhalation (dust/mist/fume)
Result: positive
Remarks: IARC (International Agency for Research on Cancer)
The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Carcinogenicity - Assessment : Positive evidence from human epidemiological studies (inhalation)

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.

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

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Ingredients:**Quartz:**

Routes of exposure: inhalation (dust/mist/fume)

Target Organs: Lungs

Assessment: Shown to produce significant health effects in animals at concentrations of 0.02 mg/l/6h/d or less.

Repeated dose toxicity**Ingredients:****Quartz:**

Species: Humans

LOAEL: 0.053 mg/m³

Application Route: Inhalation

Remarks: OECD SIDS

The substance is inextricably bound in the product and therefore does not contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Resource Conservation and Recovery Act (RCRA) : When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste.

Waste Code : D003: Reactivity

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 handling 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

Not applicable for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version 1.1	Revision Date: 12/03/2014	MSDS Number: 691975-00002	Date of last issue: 10/31/2014 Date of first issue: 10/31/2014
----------------	------------------------------	------------------------------	---

This material does not contain any components with a section 304 EHS RQ.

- SARA 311/312 Hazards** : No SARA Hazards
- SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 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.

US State Regulations**Pennsylvania Right To Know**

Dimethyl Siloxane, Dimethylvinylsiloxy-terminated	68083-19-2	30 - 50 %
Quartz	14808-60-7	30 - 50 %
Dimethyl, Methylhydrogen Siloxane, Trimethylsiloxy-terminated	68037-59-2	5 - 10 %
Aluminum oxide	1344-28-1	0.1 - 1 %

New Jersey Right To Know

Dimethyl Siloxane, Dimethylvinylsiloxy-terminated	68083-19-2	30 - 50 %
Quartz	14808-60-7	30 - 50 %
Dimethyl, Methylhydrogen Siloxane, Trimethylsiloxy-terminated	68037-59-2	5 - 10 %

- California Prop 65** : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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

- NZIoC** : All ingredients listed or exempt.
- REACH** : All ingredients (pre-)registered 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.

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

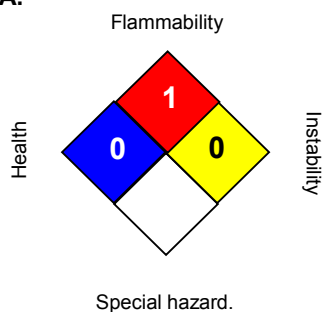
Version 1.1	Revision Date: 12/03/2014	MSDS Number: 691975-00002	Date of last issue: 10/31/2014 Date of first issue: 10/31/2014
----------------	------------------------------	------------------------------	---

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).

PICCS : All ingredients listed or exempt.

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**Further information****NFPA:****HMIS III:**

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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 Agency, <http://echa.europa.eu/>

Revision Date : 12/03/2014

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.

SYLGARD(R) 170 SILICONE ELASTOMER (PART B) (PART B information is below)

Version	Revision Date:	MSDS Number:	Date of last issue: 10/31/2014
1.1	12/03/2014	691975-00002	Date of first issue: 10/31/2014

US / Z8