DOW CORNING

# DOW CORNING CORPORATION
# Material Safety Data Sheet


Version: 2.0
Revision Date: 2010/03/23

## DOW CORNING(R) 736 HEAT RESISTANT/SEALANT

### 1. PRODUCT AND COMPANY IDENTIFICATION

**MSDS No.: 01890590**

**SUPPLIER:**
**Dow Corning Canada Inc.**
**15-6400 Millcreek Drive, Suite 416**
**Mississauga, ON, Canada L5N 3E7**

**Prepared by Product Safety: (800) 248-2481**
**NEWALTA: (800) 567-7455**
**Revision Date: 2010/03/23**

**MANUFACTURER:**
**Dow Corning Corporation**
**South Saginaw Road**
**Midland, Michigan 48686**

**24 Hour Emergency Telephone: (989) 496-5900**

**WHMIS CLASSIFICATION: Class D, Division 2, Subdivision A.**
**Class D, Division 2, Subdivision B.**

**Material Usage: Sealant and adhesive**

### 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**Generic Description: Silicone elastomer**
**Physical Form: Paste**
**Colour: Red**
**Odour: Acetic acid**

**Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.**

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**POTENTIAL HEALTH EFFECTS**

**Acute Effects**

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

**Prolonged/Repeated Exposure Effects**

Skin: No known applicable information.

Inhalation**:** No known applicable information.

Oral: No known applicable information.

**Other Health Effects**

This product contains a chemical(s) that has the following effect(s):
Reproductive Toxicity

See Section 11 for specific details.

**Signs and Symptoms of Overexposure**

No known applicable information.

**Medical Conditions Aggravated by Exposure**

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS Number | Wt % | Component Name |
|---|---|---|
| 7631-86-9 | 7.0 - 13.0 | Silica, amorphous |
| 17689-77-9 | 1.0 - 5.0 | Ethyltriacetoxysilane |
| 4253-34-3 | 1.0 - 5.0 | Methyltriacetoxysilane |
| 556-67-2 | 0.1 - 1.0 | Octamethylcyclotetrasiloxane |

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555.

## 4. FIRST AID MEASURES

Eye: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 - 20 minutes while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately obtain medical attention.

Skin: Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.

| | |
|---|---|
| Inhalation: | If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice. |
| Oral: | If irritation or discomfort occur, obtain medical advice. |
| Notes to Physician: | Treat according to person's condition and specifics of exposure. |

## 5. FIRE-FIGHTING MEASURES

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|---|---|
| Flash Point: | Not applicable. |
| Autoignition Temperature: | Not available. |
| Flammability Limits in Air: | Not available. |
| Extinguishing Media: | On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO2), dry chemical or water spray. Water can be used to cool fire exposed containers. |
| Fire Fighting Measures: | Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool. |
| Unusual Fire Hazards: | None. |

## 6. ACCIDENTAL RELEASE MEASURES

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| Containment/Clean up: | Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. |

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

## 7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact.

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

Consult local authorities for acceptable provincial values.

| CAS Number | Component Name | Exposure Limits |
|---|---|---|
| 7631-86-9 | Silica, amorphous | OSHA PEL (final rule): TWA 80mg/m3/%SiO2. NIOSH REL: TWA 6mg/m3.<br>LC50: > 2.08 mg/l - Inhalation Rat ; 4hr dust/mist<br>LD50: > 3,300 mg/kg - Oral Rat<br>LD50: > 5,000 mg/kg - Dermal Rabbit |
| 17689-77-9 | Ethyltriacetoxysilane | See acetic acid comments.<br>LD50: 1,460 mg/kg - Oral Rat |
| 4253-34-3 | Methyltriacetoxysilane | See acetic acid comments.<br>LD50: 1,602 mg/kg - Oral Rat |
| 556-67-2 | Octamethylcyclotetrasiloxane | Dow Corning guide: TWA 10 ppm.<br>LC50: 36 mg/l - Inhalation Rat ; 4hr vapor<br>LD50: > 5,000 mg/kg - Oral Rat<br>LD50: > 4,640 mg/kg - Dermal Rabbit |

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

**Engineering Controls**

| | |
|---|---|
| Local Ventilation: | None should be needed. |
| General Ventilation: | Recommended. |

**Personal Protective Equipment for Routine Handling**

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|---|---|
| Eyes: | Use proper protection - safety glasses as a minimum. |
| Skin: | Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended. |
| Suitable Gloves: | Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials. |
| Inhalation: | No respiratory protection should be needed. |

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|---|---|
| Suitable Respirator: | None should be needed. |

**Personal Protective Equipment for Spills**

| | |
|---|---|
| Eyes: | Use proper protection - safety glasses as a minimum. |
| Skin: | Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended. |
| Inhalation/Suitable Respirator: | No respiratory protection should be needed. |
| Precautionary Measures: | Avoid eye contact. Avoid skin contact. Use reasonable care. |
| Comments: | Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. |

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Physical Form: | Paste |
| Color: | Red |
| Odor: | Acetic acid |
| Odor Threshold: | Not available. |
| Specific Gravity @ 25°C: | 1.04 |
| Viscosity: | Not available. |
| Freezing/Melting Point: | Not available. |
| Boiling Point: | Not available. |
| Vapor Pressure @ 25°C: | Not available. |
| Vapor Density: | Not available. |
| Evaporation Rate: | Not available. |
| Solubility in Water: | Not available. |
| Coefficient of Water/Oil Distribution: | Not available. |
| pH: | Not available. |
| Volatile Content: | Not available. |
| Flash Point: | Not applicable. |
| Autoignition Temperature: | Not available. |
| Flammability Limits in Air: | Not available. |

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| Chemical Stability: | Stable. |
| Hazardous Polymerization: | Hazardous polymerization will not occur. |
| Conditions to Avoid: | None. |
| Materials to Avoid: | Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8. |

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Metal oxides.

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicology Information**

Recent results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. These effects, which have been shown to be rat-specific, occur at the highest exposure dose (700 ppm) only, a level that greatly exceeds typical workplace or consumer exposures. Industrial, commercial, or consumer uses of products containing D4 do not represent a risk to humans.

Octamethylcyclotetrasiloxane administered to rats by inhalation at concentrations of 500 and 700 ppm resulted in statistically significant decreases in the number of pups born and the live litter size in both the first and second generations. Prolonged estrous cycles, and decreased mating and fertility indices were observed following 700 ppm exposure in the second generation only. There were also increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia). Subsequent mode of action work demonstrated the effect on reproduction in female rats is due to delayed ovulation caused by a treatment-related delay in or blockage of the luteinizing hormone (LH) surge on the day of proestrus. This mode of action is not considered relevant to humans.

**Special Hazard Information on Components**

**Reproductive Toxicity**

| CAS Number | Wt % | Component Name | |
|---|---|---|---|
| 556-67-2 | 0.1 - 1.0 | Octamethylcyclotetrasiloxane | Evidence of reproductive effects in laboratory animals. |

## 12. ECOLOGICAL INFORMATION

**Environmental Fate and Distribution**

Complete information is not yet available.

**Environmental Effects**

Complete information is not yet available.

**Fate and Effects in Waste Water Treatment Plants**

Complete information is not yet available.

Ecotoxicity Classification Criteria

| Hazard Parameters (LC50 or EC50) | High | Medium | Low |
|---|---|---|---|
| Acute Aquatic Toxicity (mg/L) | <=1 | >1 and <=100 | >100 |
| Acute Terrestrial Toxicity | <=100 | >100 and <= 2000 | >2000 |

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

## 13. DISPOSAL CONSIDERATIONS

Can be incinerated in accordance with local regulations.

Call local hazardous waste disposal company or provincial waste authorities for more information.

## 14. TRANSPORT INFORMATION

**Canada Road (Based on IMDG Regulations)**

Not subject to local road regulations.

**Ocean Shipment (IMDG)**

Not subject to IMDG code.

**Air Shipment (IATA)**

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

## 15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

| | |
|---|---|
| WHMIS CLASSIFICATION: | Class D, Division 2, Subdivision A.<br>Class D, Division 2, Subdivision B. |
| DSL STATUS: | All chemical substances in this material are included on or exempted from the DSL. |

## 16. OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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