

Date : 09/30/2014

Version: 3

# **Material Safety Data Sheet**

#### Oxime Black RTV Silicone

# 1. Product and company identification

Product name : Oxime Black RTV Silicone

Material uses : Sealant.

Manufacturer : Dow Corning Corporation

South Saginaw Road Midland, Michigan 48686

**Supplier** : Adaseal International Inc.

5468 Hwy 70 W Waverly, TN. 37185 Phone: 931-296-2291 Toll Free: 800-521-2521 Fax: 931-296-5239

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Hours of operation : 24 hours/day, 7 days/week

### 2. Hazards identification

For this product, the ignition distance test and the flammability test do not apply. Therefore, the final product is non-flammable.

#### **Emergency overview**

Physical state : Liquid. [Paste.]

Color : Black.
Odor : Some odor.
Signal word : DANGER!

Hazard statements : MAY CAUSE SEVERE ALLERGIC SKIN REACTION. CAUSES EYE IRRITATION.

MAY CAUSE SKIN IRRITATION. CANCER HAZARD - CONTAINS MATERIAL

WHICH CAN CAUSE CANCER.

**Precautionary measures**: Do not handle until all safety precautions have been read and understood. Obtain

special instructions before use. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required. Use equipment rated for cylinder pressure. Use a backflow preventative device in piping.

Close valve after each use and when empty. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

**Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Ingestion : No known significant effects or critical hazards.

Skin : Slightly irritating to the skin. May cause sensitization by skin contact.

Eyes : Irritating to eyes.

#### Potential chronic health effects





**Fertility effects** 

### 2. Hazards identification

Chronic effects : Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

**Carcinogenicity** : Contains material which can cause cancer. Risk of cancer depends on duration and

level of exposure.

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: central nervous

: No known significant effects or critical hazards.

system (CNS).

#### Over-exposure signs/symptoms

Inhalation : No known significant effects or critical hazards.Ingestion : No known significant effects or critical hazards.

**Skin** : Adverse symptoms may include the following:

irritation redness

**Eyes** : Adverse symptoms may include the following:

pain or irritation

watering redness

Medical conditions aggravated by overexposure

: Pre-existing skin disorders may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

### 3. Composition/information on ingredients

Name	CAS number	%	WHMIS (Classification)
Silicon dioxide	7631-86-9	5 - 10	Not controlled under WHMIS (Canada).
Butan-2-one O,O',O"-(methylsilylidyne)trioxime	22984-54-9	5 - 10	Class D-2B: Material causing other toxic effects (Toxic).
1,1-Difluoroethane	75-37-6	1 - 5	Class A: Compressed gas.
			Class B-1: Flammable gas.
Siloxanes and Silicones, di-Me	63148-62-9	1 - 5	Class D-2B: Material causing other toxic effects (Toxic).
Titanium dioxide	13463-67-7	0 - 0.1	Class D-2A: Material causing other toxic effects (Very toxic).
Carbon black	1333-86-4	0 - 0.1	Class D-2A: Material causing other toxic effects (Very toxic).

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical

attention immediately.

**Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean

shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.



### 4. First aid measures

### Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

#### **Protection of first-aiders**

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### 5. Fire-fighting measures

Flammability of the product : No specific fire or explosion hazard.

**Extinguishing media** 

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

**Special exposure hazards** 

: No special precaution is required.

**Hazardous thermal** decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds

carbonyl halides metal oxide/oxides

**Special protective** equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards

: Not available.

Special remarks on explosion hazards

: Not available.

### 6. Accidental release measures

#### **Personal precautions**

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

### **Environmental precautions**

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

### **Small spill**

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.



### 6. Accidental release measures

#### Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### 7. Handling and storage

#### **Handling**

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### **Storage**

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# 8. Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours) STEL (15 mins)		Ceiling							
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
1,1-Difluoroethane	US AIHA 5/2010	1000	-	-	-	-	-	-	-	-	
Titanium dioxide	US ACGIH 6/2013	-	10	-	-	-	-	-	-	-	
	AB 4/2009	-	10	-	-	-	-	-	-	-	[3]
	BC 7/2013	-	3	-	-	-	-	-	-	-	[a]
		-	10	-	-	-	-	-	-	-	[a] [b]
	ON 1/2013	-	10	-	-	-	-	-	-	-	[b] [b] [c]
	QC 12/2012	-	10	-	-	-	-	-	-	-	[b]
Carbon black	US ACGIH 6/2013	-	3	-	-	-	-	-	-	-	[c]
	AB 4/2009	-	3.5	-	-	-	-	-	-	-	
	BC 7/2013	-	3	-	-	-	-	-	-	-	[d]
	ON 1/2013	-	3	-	-	-	-	-	-	-	[c]
	QC 12/2012	-	3.5	-	-	-	-	-	-	-	

[3]Skin sensitization

Form: [a]Respirable dust [b]Total dust [c]Inhalable fraction [d]Inhalable

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.





### 8. Exposure controls/personal protection

### **Engineering measures**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Personal protection**

Respiratory

: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Eyes** 

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Other protection

: Not available.

### 9. Physical and chemical properties

**Physical state** : Liquid. [Paste.] **Flash point** : Not available. **Burning time** : Not applicable. **Burning rate** : Not applicable. : Not available. **Auto-ignition temperature** Flammable limits : Not available.

Color : Black. Odor : Some odor. **Taste** : Not available. Molecular weight : Not applicable. Molecular formula : Not applicable. pH : Not available. **Boiling/condensation point** : Not available. **Melting/freezing point** : Not available.



# 9. Physical and chemical properties

Critical temperature : Not available.

Relative density : 1.04

Vapor pressure : Not available. Vapor density : Not available. Volatility : Not available. **Odor threshold** : Not available. **Evaporation rate** : Not available. **SADT** : Not available. : Not available. **Viscosity lonicity (in water)** : Not available. **Dispersibility properties** : Not available.

**Partition coefficient** 

(LogKow)

Solubility

: Not available.: Not available.

Physical/chemical properties comments

: Not available.

### 10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and moisture.

Hazardous decomposition

: Under normal conditions of storage and use, hazardous decomposition products

products

should not be produced.

Possibility of hazardous

: Under normal conditions of storage and use, hazardous reactions will not occur.

reactions

### 11. Toxicological information

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Siloxanes and Silicones, di-Me Carbon black			>2000 mg/kg >15400 mg/kg	-

#### **Chronic toxicity**

There is no data available.

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Silicon dioxide	Eyes - Mild irritant	Rabbit	-	24 hours 25 mg	-
Siloxanes and Silicones, di-Me	Eyes - Mild irritant	Rabbit	-	1 hours 100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 μL	-
	Eyes - Mild irritant	Rabbit	-	24 hours 100 μL	-
Titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 µg	-
				Intermittent	

### **Sensitizer**

Skin : There is no data available.Respiratory : There is no data available.

**Carcinogenicity** 



### 11. Toxicological information

### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Silicon dioxide	-	3	-	-	-	-
Titanium dioxide	A4	2B	-	+	-	-
Carbon black	A3	2B	-	+	-	-

### **Mutagenicity**

There is no data available.

### **Teratogenicity**

There is no data available.

### **Reproductive toxicity**

There is no data available.

**Synergistic products**: Not available.

### 12. Ecological information

### **Ecotoxicity**

: No known significant effects or critical hazards.

### **Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
Silicon dioxide	Acute EC50 55.5 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 4.6 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
Siloxanes and Silicones, di-Me	Acute LC50 44.5 ppm Fresh water	Daphnia - Daphnia magna - Instar	48 hours
	Acute LC50 3160 to 4150 µg/L Fresh water	Fish - Ictalurus punctatus	96 hours
Titanium dioxide	Acute EC50 5.83 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 3 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1000 mg/L Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 0.984 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours

#### Persistence/degradability

There is no data available.

Partition coefficient: n-octanol/water

: Not available.

Bioconcentration factor Mobility Not available.Not available.

Toxicity of the products of

: Not available.

biodegradation

Other adverse effects

: No known significant effects or critical hazards.

### 13. Disposal considerations

### **Waste disposal**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.





### 13. Disposal considerations

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains

and sewers.

Waste stream : Not available.

RCRA classification : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

### 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	UN1950	Aerosols, flammable (each not exceeding 1 L capacity) (1,1-Difluoroethane)	2.1	-	2	Remarks Limited Quantity Exemption
IMDG Class	UN1950	Aerosols, flammable (each not exceeding 1 L capacity) (1,1-Difluoroethane)	2.1	-		Remarks Limited Quantity Exemption
IATA-DGR Class	UN1950	Aerosols, flammable (each not exceeding 1 L capacity) (1,1-Difluoroethane)	2.1	-		Remarks Limited Quantity Exemption

PG\*: Packing group Exemption to the above classification may apply. AERG: 126

### 15. Regulatory information

WHMIS (Canada)
: Class A: Compressed gas.

**Canadian lists** 

Canadian NPRI : The following components are listed: 1,1-Difluoroethane
CEPA Toxic substances : The following components are listed: 1,1-Difluoroethane

**Canada inventory** : All components are listed or exempted.

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

### 16. Other information

Label requirements : MAY CAUSE SEVERE ALLERGIC SKIN REACTION. CAUSES EYE IRRITATION.

MAY CAUSE SKIN IRRITATION. CANCER HAZARD - CONTAINS MATERIAL

WHICH CAN CAUSE CANCER.

**Canada** 

WHMIS (Canada) :



**History** 

Date of issue : 09/30/2014

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# 16. Other information

**Version** : 3

**Revised Section(s)** : 1, 2, 3, 14, 16.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

