SAFETY DATA SHEET



Oxime Black RTV Silicone MN118

Section 1. Identification

GHS product identifier

: Oxime Black RTV Silicone

Other means of identification

: Not available.

Relevant identified uses of the substance or mixture and uses advised against

Sealant.

Supplier's details: Adaseal International Inc.

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

E-Mail: adaseal2@adaseal.com

Emergency telephone number (with hours of operation) : CHEMTREC, U.S.: 1-800-424-9300 International: +1-703-527-3887

24 hours/day, 7 days/week

Section 2. Hazards identification

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

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: GASES UNDER PRESSURE - Liquefied gas SKIN SENSITIZATION - Category 1

CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms







Signal word

: Warning

Hazard statements

: Contains gas under pressure; may explode if heated.

May cause an allergic skin reaction. Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.





Section 2. Hazards identification

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Do not breathe vapor. Contaminated work clothing should not be allowed out of the workplace.

Response

: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

Storage

: Store locked up. Protect from sunlight. Store in a well-ventilated place.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable. **Product code** : Not available.

| Ingredient name | % | CAS number | Pure Substance Classification |
|--|---------|------------|--|
| Butan-2-one O,O',O"-(methylsilylidyne)trioxime | 5 - 10 | 22984-54-9 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (cardiovascular system and haematopoietic system) - Category 2 |
| Siloxanes and Silicones, di-Me | 1 - 5 | 63148-62-9 | AQUATIC HAZARD (ACUTE) - Category 3 |
| Titanium dioxide | 0 - 0.1 | 13463-67-7 | CARCINOGENICITY - Category 2 |
| Carbon black | 0 - 0.1 | 1333-86-4 | CARCINOGENICITY - Category 2 |
| 1,1-Difluoroethane | 1 - 5 | 75-37-6 | FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Liquefied gas |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

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

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.



Section 4. First aid measures

Skin contact

: Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

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

be delayed following exposure.

Skin contact: May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Adverse symptoms may include the following:

irritation redness

Ingestion: No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

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.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.





Section 5. Fire-fighting measures

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 actions for fire-fighters

: No special precaution is required.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. 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.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

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 and materials for containment and 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.

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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). 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 handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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



Section 7. Handling and storage

Advice on general occupational hygiene

retain product residue and can be hazardous. Do not reuse container.

: 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. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

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. Store locked up. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------|---|
| Titanium dioxide | OSHA PEL (United States, 2/2013). |
| | TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| | ACGIH TLV (United States, 6/2013). |
| | TWA: 10 mg/m³ 8 hours. |
| Carbon black | ACGIH TLV (United States, 6/2013). |
| | TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction |
| | NIOSH REL (United States, 4/2013). |
| | TWA: 3.5 mg/m³ 10 hours. |
| | TWA: 0.1 mg of PAHs/cm ³ 10 hours. |
| | OSHA PEL (United States, 2/2013). |
| | TWA: 3.5 mg/m ³ 8 hours. |

Appropriate engineering controls

: 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.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

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.

Eye/face protection

: 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection



Section 8. Exposure controls/personal protection

Hand protection

: 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.

Body protection

: 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.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: 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.

Section 9. Physical and chemical properties

Appearance

: Liquid. [Paste.] **Physical state**

Color : Black.

Odor Some odor. **Odor threshold** : Not available. Not available. рH **Melting point** Not available. : Not available. **Boiling point** Flash point Not available. Not applicable. **Burning time**

Burning rate Not applicable. **Evaporation rate** Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density : Not available.

Relative density 1.04

Not available. Solubility : Not available. Solubility in water Partition coefficient: n-Not available.

octanol/water

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available. **SADT** : Not available. **Viscosity** : Not available.



Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous reactions

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

Conditions to avoid

: No specific data.

Incompatible materials

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

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|------------------------|---------|-----------------------------|----------|
| Siloxanes and Silicones, di-Me Carbon black | LD50 Oral LD50 Oral | | >2000 mg/kg >15400 mg/kg | - |

Irritation/Corrosion

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

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

| Product/ingredient name | OSHA | IARC | ACGIH | NTP |
|-------------------------|------|------|-------|-----|
| Titanium dioxide | - | 2B | A4 | - |
| Carbon black | - | 2B | A3 | - |

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)



Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|---|
| Butan-2-one O,O',O"-(methylsilylidyne)trioxime | Category 2 | | cardiovascular system and haematopoietic system |

Aspiration hazard

There is no data available.

Information on the likely routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

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

be delayed following exposure.

Skin contact: May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Adverse symptoms may include the following:

irritation redness

Ingestion: No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects: No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General: May cause damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very low

levels.

Carcinogenicity : Suspected of causing 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.Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates





Section 11. Toxicological information

There is no data available.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--------------------------------|--|---|----------|
| 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 - | 72 hours |
| | | Exponential growth phase | |
| | Acute LC50 3 mg/L Fresh water | Crustaceans - Ceriodaphnia dubia - | 48 hours |
| | - | Neonate | |
| | Acute LC50 5.5 ppm Fresh water | Daphnia - Daphnia magna - Juvenile | 48 hours |
| | | (Fledgling, Hatchling, Weanling) | |
| | Acute LC50 1000 mg/L Fresh water | Fish - Pimephales promelas | 96 hours |
| | Chronic NOEC 0.984 mg/L Fresh water | Algae - Pseudokirchneriella subcapitata - | 72 hours |
| | | Exponential growth phase | |

Persistence and degradability

There is no data available.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Titanium dioxide | - | 352 | low |

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

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





Section 14. Transport information

| | DOT Classification | IMDG | IATA |
|----------------------------|---|---|---|
| UN number | UN1950 | UN1950 | UN1950 |
| UN proper shipping name | Aerosols, flammable (each not exceeding 1 L capacity) (1, 1-Difluoroethane) | Aerosols, flammable (each not exceeding 1 L capacity) (1, 1-Difluoroethane) | Aerosols, flammable (each not exceeding 1 L capacity) (1, 1-Difluoroethane) |
| Transport hazard class(es) | 2.1 | 2.1 | 2.1 |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | Remarks Limited Quantity Exemption | Remarks Limited Quantity Exemption | Remarks Limited Quantity Exemption |

AERG : 126

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according: Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act (CAA) 112 regulated flammable substances: 1,1-Difluoroethane

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312





Section 15. Regulatory information

Classification : Sudden release of pressure

> Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

| Name | % | | Sudden release of pressure | | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|--|---------|-------------------|----------------------------------|-------------------|--|--|
| Butan-2-one O,O',O"-(methylsilylidyne)trioxime Titanium dioxide Carbon black | 0 - 0.1 | No. No. No. | No. | No. No. No. | Yes. No. No. | Yes. Yes. Yes. |

State regulations

Massachusetts : The following components are listed: Silicon dioxide; 1,1-Difluoroethane

: None of the components are listed. **New York**

: The following components are listed: 1,1-Difluoroethane; Titanium dioxide; Carbon black **New Jersey**

Pennsylvania : The following components are listed: Silicon dioxide; Titanium dioxide; Carbon black

California Prop. 65

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

| Ingredient name | Cancer | • | Maximum acceptable dosage level |
|----------------------------------|--------|---|---|
| Titanium dioxide Carbon black | | - | No. No. |

International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule

I Chemicals

: Not listed

Chemical Weapons Convention List Schedule

II Chemicals

: Not listed

Chemical Weapons Convention List Schedule

III Chemicals

: Not listed





Section 16. Other information

History

Date of issue mm/dd/yyyy : 09/30/2014

Date of previous issue : 05/30/2014

Version : 3

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

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

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.