



## SAFETY DATA SHEET

### MITEE SEAL – HT HIGH TEMPERATURE SILICONE SEALANT

#### SECTION 1. IDENTIFICATION

Product Name : Mitee Seal HT- High Temperature Silicone Sealant  
Product Code : MSSA4xxxx Series Sealants

#### Manufacturer or Supplier Details

Company Name of Supplier : Mitex Building Products, LLC  
Physical Address : 1000 Airport Rd, Terrell, TX 75160  
Mailing Address : PO Box 1099, Terrell, TX 75160  
Telephone : 469-209-6500  
Emergency Telephone (24/7) : ChemTel: 1-800-255-3924

#### Recommended use of the chemical and restrictions on use

Recommended Use : Adhesive, binding agents

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

Skin irritation : Category 2  
Serious eye damage : Category 1  
Reproductive toxicity : Category 2

##### GHS Label Element

Hazard Pictograms :



Signal Word : Danger  
Hazard Statements : H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H361 Suspected of damaging fertility or the unborn child.  
Precautionary Statements : Prevention:  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.



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**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
 P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other Hazards**

Repeated exposure may cause skin dryness or cracking.

### SECTION 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture  
 Chemical nature : Silicone elastomer

**Hazardous ingredients**

| Chemical Name                                | CAS-No.    | Concentration (%) |
|--|------------|-------------------|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | >= 20 - < 30      |
| Silicon dioxide                              | 7631-86-9  | >= 5 - < 10       |
| Ethyltriacetoxysilane                        | 17689-77-9 | >= 1 - < 5        |
| Methyltriacetoxysilane                       | 4253-34-3  | >= 1 - < 5        |
| Octamethylcyclotetrasiloxane                 | 556-67-2   | >= 0.1 - < 1      |
| Titanium dioxide                             | 13463-67-7 | >= 0.1 - < 1      |
| Carbon black                                 | 1333-86-4  | >= 0.1 - < 1      |

### SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
 When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
 Get medical attention if symptoms occur.



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- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention immediately.
- 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. : Causes skin irritation.  
Causes serious eye damage.  
Suspected of damaging fertility or the unborn child.  
Prolonged or repeated contact may dry skin and cause irritation.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
- Notes to physician : Treat symptomatically and supportively.
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### SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)
- 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 : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.
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### SECTION 6. ACCIDENTAL RELEASE MEASURES

Compiled By : Mitex Building Products, LLC [www.mitexint.com](http://www.mitexint.com)  
SDS Established : 1/1/2016  
Revision Date : N/A  
Version : GHS 1.0



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- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
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.  
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.
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### SECTION 7. HANDLING AND STORAGE

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Do not get on skin or clothing.  
Do not swallow.  
Do not get in eyes.  
Handle in accordance with good industrial hygiene and safety practice.  
Keep container tightly closed.  
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.  
Keep tightly closed.  
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents
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### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Ingredients with workplace control parameters

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| Ingredients                                  | CAS-No.    | Value type (Form of exposure) | Control parameters / Permissible concentration    | Basis     |
|--|------------|-------------------------------|---|-----------|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | TWA (Mist)                    | 5 mg/m <sup>3</sup>                               | NIOSH REL |
|  |            | ST (Mist)                     | 10 mg/m <sup>3</sup>                              | NIOSH REL |
| Silicon Dioxide                              | 7631-86-9  | TWA (Mist)                    | 5 mg/m <sup>3</sup>                               | OSHA Z-1  |
|  |            | TWA (Dust)                    | 20 million particles per ft <sup>3</sup> (Silica) | OSHA Z-3  |
|  |            | TWA (Dust)                    | 80 mg/m <sup>3</sup> / % SiO <sub>2</sub>         | OSHA Z-3  |
|  |            | TWA                           | 6 mg/m <sup>3</sup> (Silica)                      | NIOSH REL |
| Octamethylcyclotetrasiloxane                 | 556-67-7   | TWA                           | 10 ppm  | DCC OEL   |
| Titanium Dioxide                             | 13463-67-7 | TWA (total dust)              | 15 mg/m <sup>3</sup>                              | OSHA Z-1  |
|  |            | TWA                           | 10 mg/m <sup>3</sup> (Titanium dioxide)           | ACGIH     |
| Carbon black                                 | 1333-86-4  | TWA                           | 3.5 mg/m <sup>3</sup>                             | NIOSH REL |
|  |            | TWA                           | 3.5 mg/m <sup>3</sup>                             | OSHA Z-1  |
|  |            | TWA (Inhalable fraction)      | 3 mg/m <sup>3</sup>                               | ACGIH     |

### Hazardous components without workplace control parameters

| Ingredients            | CAS-No.    |
|------------------------|------------|
| Ethyltriacetoxysilane  | 17689-77-9 |
| Methyltriacetoxysilane | 4253-34-3  |

### Occupational exposure limits of decomposition products

| Ingredients | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis     |
|-------------|---------|-------------------------------|--|-----------|
| Acetic acid | 64-19-7 | TWA                           | 10 ppm   | ACGIH     |
|             |         | STEL                          | 15 ppm   | ACGIH     |
|             |         | ST                            | 15 ppm<br>37 mg/m <sup>3</sup>                 | NIOSH REL |
|             |         | TWA                           | 10 ppm<br>25 mg/m <sup>3</sup>                 | NIOSH REL |
|             |         | TWA                           | 10 ppm<br>25 mg/m <sup>3</sup>                 | OSHA Z-1  |

**Engineering measures** : Processing may form hazardous compounds (see section 10)  
Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn.



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Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

### Hand Protection

- : Impervious gloves
- Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product.
- Change gloves often!
- For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

### Eye Protection

- : Wear the following personal protective equipment:
- Chemical resistant goggles must be worn.
  - If splashes are likely to occur, wear a Face-shield

### Skin and body protection

- : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
- Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

### Hygiene measures

- : Ensure that eye flushing systems and safety showers are located close to the working place.
- When using do not eat, drink or smoke.
- Wash contaminated clothing before re-use.
- These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Paste
- Color : In accordance with the product description
- Odor : Acetic acid
- Odor threshold : No data available
- pH : Not applicable
- Melting point/Freezing point : No data available
- Initial boiling point and boiling range : Not applicable
- Flash point : >100°C
- Evaporation rate : Not applicable
- Flammability (solid, gas) : Not classified as a flammability hazard
- Method: closed cup



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|  |   |
|--|---|
| Upper explosion limit                  | : No data available                                       |
| Lower explosion limit                  | : No data available                                       |
| Vapor pressure                         | : Not applicable  |
| Relative vapor density                 | : No data available                                       |
| Relative density                       | : 0.96  |
| Solubility - Water                     | : No data available                                       |
| Partition coefficient: n-octanol/water | : No data available                                       |
| Auto-ignition temperature              | : No data available                                       |
| Thermal decomposition                  | : No data available                                       |
| Viscosity, dynamic                     | : 200,000 mPa.s   |
| Explosive properties                   | : Not explosive   |
| Oxidizing properties                   | : The substance or mixture is not classified as oxidizing |
| Molecular weight                       | : No data available                                       |

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### SECTION 10. STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : Not classified as a reactivity hazard.   |
| Chemical stability                 | : Stable under normal conditions.  |
| Possibility of hazardous reactions | : Use at elevated temperatures may form highly hazardous compounds.<br>Can react with strong oxidizing agents.<br>Hazardous decomposition products will be formed upon contact with water or humid air.<br>Hazardous decomposition products will be formed at elevated temperatures. |
| Conditions to avoid                | : Exposure to moisture.  |
| Incompatible materials             | : Oxidizing agents<br>Water  |
| Hazardous decomposition products   |  |
| Contact with water or humid air    | : Acetic acid  |
| Thermal decomposition              | : Formaldehyde   |

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.



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### Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

### Ingredients:

#### **Distillates (petroleum), hydrotreated middle:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Acute inhalation toxicity : LC50 (Rat): > 5,000 mg/m<sup>3</sup>  
Exposure time: 4 h  
Test atmosphere: vapor  
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

#### **Silicon dioxide:**

Acute oral toxicity : LD50 (Rat): > 3,300 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Information taken from reference works and the literature.  
Acute inhalation toxicity : LC50 (Rat): > 2.08 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation Toxicity  
Remarks: Information taken from reference works and the literature.  
Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Information taken from reference works and the literature.

#### **Ethyltriacetoxysilane:**

Acute oral toxicity : LD50 (Rat): 380 mg/kg  
Remarks: Based on test data

#### **Methyltriacetoxysilane:**

Acute oral toxicity : LD50 (Rat): 1,550 mg/kg  
Remarks: Based on test data

#### **Octamethylcyclotetrasiloxane:**

Acute oral toxicity : LD50 (Rat): > 4,800 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on test data





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Acute inhalation toxicity

: LC50 (Rat): 2975 ppm  
Exposure time: 4 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on test data

Acute dermal toxicity

: LD50 (Rabbit): > 2.5 ml/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on test data

### **Titanium dioxide:**

Acute oral toxicity

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

Acute inhalation toxicity

: LC50 (Rat): > 6.82 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

### **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**

Causes skin irritation.

### **Ingredients:**

#### **Distillates (petroleum), hydrotreated middle:**

Assessment: Repeated exposure may cause skin dryness or cracking.

#### **Silicon dioxide:**

Result: No skin irritation

Remarks: Information taken from reference works and the literature.

#### **Ethyltriacetoxysilane:**

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

Remarks: Information taken from reference works and the literature.

#### **Methyltriacetoxysilane:**

Species: Rabbit



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Result: Corrosive after 1 to 4 hours of exposure  
Remarks: Based on test data

### **Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on test data

### **Titanium dioxide:**

Species: Rabbit  
Result: No skin irritation

### **Carbon black:**

Species: Rabbit  
Result: No skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### **Ingredients:**

#### **Distillates (petroleum), hydrotreated middle:**

Result: No eye irritation

#### **Silicon dioxide:**

Result: No eye irritation  
Remarks: Information taken from reference works and the literature.

#### **Ethyltriacetoxysilane:**

Result: Irreversible effects on the eye  
Remarks: Expert judgment

#### **Methyltriacetoxysilane:**

Species: Rat  
Result: Irreversible effects on the eye  
Remarks: Based on test data

#### **Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on test data

#### **Titanium dioxide:**



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Species: Rabbit  
Result: No eye irritation

### **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:**

#### **Distillates (petroleum), hydrotreated middle:**

Test Type: Human repeat insult patch test (HRIPT)  
Routes of exposure: Skin contact  
Result: negative

#### **Silicon dioxide:**

Assessment: Does not cause skin sensitization.

Test Type: Skin: test type not specified  
Species: Guinea pig  
Remarks: No known sensitizing effect.  
Information taken from reference works and the literature.

#### **Octamethylcyclotetrasiloxane:**

Assessment: Does not cause skin sensitization.

Test Type: Maximization Test (GPMT)  
Species: Guinea pig  
Remarks: No known sensitizing effect.  
Based on test data

#### **Titanium dioxide:**

Test Type: Local lymph node assay (LLNA)  
Routes of exposure: Skin contact  
Species: Mouse  
Result: negative

#### **Carbon black:**

Test Type: Buehler Test  
Routes of exposure: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative



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### Germ cell mutagenicity

Not classified based on available information.

### Ingredients:

#### **Distillates (petroleum), hydrotreated middle:**

Genotoxicity in vitro : Test Type: In vitro sister chromatid exchange assay in mammalian cells  
Result: negative

#### **Silicon dioxide:**

Genotoxicity in vitro : Result: negative  
Remarks: Information taken from reference works and the literature.

Genotoxicity in vivo : Application Route: Ingestion  
Result: negative  
Remarks: Information taken from reference works and the literature.

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

#### **Octamethylcyclotetrasiloxane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)  
Result: negative  
Remarks: Based on test data

: Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Based on test data

: Test Type: In vitro sister chromatid exchange assay in mammalian cells  
Result: negative  
Remarks: Based on test data

: Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)  
Result: negative  
Remarks: Based on test data

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Test species: Rat



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Application Route: inhalation (vapor)

Result: negative

Remarks: Based on test data

: Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Test species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on test data

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

### **Titanium dioxide:**

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

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Test species: Mouse  
Result: negative

### **Carbon black:**

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

### **Carcinogenicity:**

Not classified based on available information.

### **Ingredients:**

#### **Titanium dioxide:**

Species: Rat

Application Route: inhalation (dust/mist/fume)

Exposure time: 24 Months

Method: OECD Test Guideline 453

Result: positive

Remarks: The mechanism or mode of action may not be relevant in humans.

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

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

#### **Carbon black:**

Species: Rat

Application Route: Inhalation

Exposure time: 2 Years

Result: positive

Target Organs: Lungs



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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 2B: Possibly carcinogenic to humans

Titanium dioxide 13463-67-7

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** 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

Suspected of damaging fertility or the unborn child.

#### Ingredients:

#### **Octamethylcyclotetrasiloxane:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat, male and female  
Application Route: inhalation (vapor)  
Symptoms: Effects on fertility.  
Remarks: Based on test data

Effects on fetal development : Test Type: Prenatal development toxicity study (teratogenicity)  
Species: Rabbit  
Application Route: inhalation (vapor)  
Symptoms: No effects on fetal development.  
Remarks: Based on test data

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.



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### Ingredients:

#### Octamethylcyclotetrasiloxane:

Routes of exposure: Ingestion

Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Routes of exposure: inhalation (vapor)

Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Routes of exposure: Skin contact

Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw 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:

#### Octamethylcyclotetrasiloxane:

Species: Rat

Application Route: Ingestion

Remarks: Based on test data

Species: Rat

Application Route: inhalation (vapor)

Remarks: Based on test data

Species: Rabbit

Application Route: Skin contact

Remarks: Based on test data

#### Titanium dioxide:

Species: Rat

NOAEL: 24,000 mg/kg

Application Route: Ingestion

Exposure time: 28 d

Species: Rat

NOAEL: 10 mg/m<sup>3</sup>

Application Route: inhalation (dust/mist/fume)

Exposure time: 2 y

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



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### Carbon black:

Species: Rat

NOAEL: 1 mg/m<sup>3</sup>

LOAEL: 7 mg/m<sup>3</sup>

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.

### Ingredients:

#### **Distillates (petroleum), hydrotreated middle:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

### Further information

### Ingredients:

#### **Octamethylcyclotetrasiloxane:**

Remarks: Results from a 2 year repeated vapor inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Based on the available information on its potential to cause harm to human health, Health Canada, in a 2008 screening assessment, has concluded that octamethylcyclotetrasiloxane is not entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health (<http://www.ec.gc.ca/eseees/default.asp?lang=En&n=2481B508-1>). Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

### Ingredients:

#### **Distillates (petroleum), hydrotreated middle:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 87,556 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 48 h





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Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): > 1,000 mg/l  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOELR: > 1,000 mg/l  
Exposure time: 28 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 5 mg/l  
Exposure time: 21 d

Toxicity to bacteria : EC50: > 100 mg/l  
Exposure time: 3 h

### **Ethyltriacetoxysilane:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 251 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia sp.): 62 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to bacteria : EC50: > 100 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
Remarks: Based on data from similar materials

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

### **Methyltriacetoxysilane:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 110 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 122 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
Remarks: Based on data from similar materials

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 120 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials



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Toxicity to bacteria

: EC50: > 100 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
Remarks: Based on data from similar materials

### Octamethyltriacetoxysilane:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.022 mg/l  
Exposure time: 96 h  
Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia sp.): > 0.015 mg/l  
Exposure time: 48 h  
Remarks: No toxicity at the limit of solubility.

Toxicity to algae

: EC50 (Pseudokirchneriella subcapitata (green algae)): > 0.022 mg/l  
Exposure time: 96 h  
Remarks: No toxicity at the limit of solubility.  
NOEC (Pseudokirchneriella subcapitata (green algae)): 0.022 mg/l  
Exposure time: 96 h

Toxicity to fish (Chronic toxicity)

: NOEC (Oncorhynchus mykiss (rainbow trout)):  $\geq$  0.0044 mg/l  
Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia sp.): > 0.0079 mg/l  
Exposure time: 21 d  
Remarks: No toxicity at the limit of solubility.

M-Factor (Chronic aquatic toxicity)

: 1

Toxicity to bacteria

: IC50: > 10,000 mg/l  
Method: ISO 8192

### Ecotoxicology Assessment

Chronic aquatic toxicity

: May cause long lasting harmful effects to aquatic life.

### Titanium dioxide:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h



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Toxicity to algae : EC50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l  
Exposure time: 72 h

Toxicity to bacteria : EC50: > 1,000 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

### 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

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

### Persistence and degradability

#### Ingredients:

##### **Distillates (petroleum), hydrotreated middle:**

Biodegradability : Result: Inherently biodegradable.

##### **Ethyltriacetoxysilane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 74 %  
Exposure time: 21 d

Stability in water : Degradation half life: < 13 s pH: 7

##### **Methyltriacetoxysilane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 74 %  
Exposure time: 21 d  
Method: C.4-A of the COUNCIL REGULATION (EC) No 440/2008  
Remarks: Based on data from similar materials

Stability in water : Degradation half life: < 12 s pH: 7  
Remarks: Based on test data

##### **Octamethyltriacetoxysilane:**



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Biodegradability

: Result: Not readily biodegradable.  
Biodegradation: 3.7 %  
Exposure time: 28 d  
Method: OECD Test Guideline 310

Stability in water

: Degradation half life: 69.3 - 144 h (24.6 °C) pH: 7  
Method: OECD Test Guideline 111

### Bioaccumulative potential

#### Ingredients:

##### **Octamethylcyclotetrasiloxane:**

Partition coefficient: n-octanol/water : log Pow: 6.48 (25.1 °C)

### Mobility in soil

No data available

### Other adverse effects

#### Ingredients:

##### **Octamethylcyclotetrasiloxane:**

Results of PBT and vPvB assessment : Remarks: Octamethylcyclotetrasiloxane (D4) meets the current REACH Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed and deemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

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## 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.



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## 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

| Ingredients      | CAS-No.  | Component RQ (lbs) | Calculated product RQ (lbs) |
|------------------|----------|--------------------|-----------------------------|
| Acetic acid      | 64-19-7  | 5000               | *                           |
| Acetic anhydride | 108-24-7 | 5000               | *                           |

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

| Ingredients             | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|-------------------------|---------|--------------------|-----------------------------|
| 10,10-Oxydiphenoxarsine | 58-36-6 | 500                | *                           |

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 311/312 Hazards

: Acute Health Hazard  
Chronic Health Hazard



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**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, hydroxy-terminated        | 70131-67-8 | 50 - 70 % |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 20 - 30 % |
| Silicon dioxide                              | 7631-86-9  | 5 - 10 %  |
| Acetic acid                                  | 64-19-7    | 0 - 0.1 % |
| Acetic anhydride                             | 108-24-7   | 0 - 0.1 % |
| Aluminium                                    | 7429-90-5  | 0 - 0.1 % |

#### New Jersey Right To Know

|  |            |           |
|--|------------|-----------|
| Dimethyl siloxane, hydroxy-terminated        | 70131-67-8 | 50 - 70 % |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 20 - 30 % |
| Silicon dioxide                              | 7631-86-9  | 5 - 10 %  |
| Ethyltriacetoxysilane                        | 17689-77-9 | 1 - 5 %   |
| Methyltriacetoxysilane                       | 4253-34-3  | 1 - 5 %   |
| Carbon black                                 | 1333-86-4  | 0 - 0.1 % |

#### California Prop 65

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

|                              |            |
|------------------------------|------------|
| Cobalt titanite green spinel | 68186-85-6 |
|------------------------------|------------|

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

IECSC : All ingredients listed or exempt.

DSL : This product contains one or more substances which are not on the Canadian Domestic Substances List (DSL). Import of this product into Canada has volume limitations.

REACH : N/A

TSCA : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.



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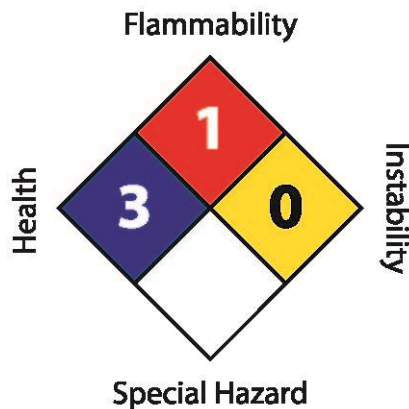
## Inventories

DSL (Canada), TSCA (USA)

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

|                        |           |
|------------------------|-----------|
| <b>HEALTH</b>          | <b>3*</b> |
| <b>FLAMMABILITY</b>    | <b>1</b>  |
| <b>PHYSICAL HAZARD</b> | <b>0</b>  |

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
- ACGIH / STEL : Short-term exposure limit
- NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
- NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
- 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 Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be



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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