

**Revision number:** 1 Revision date: 07/06/2018

#### **1. IDENTIFICATION**

Product name: Product code:

#### Product use: **Restrictions on use:**

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail:

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| sales-US@TCIchemicals.com<br>www.TCIchemicals.com | TCI America<br>Environmental Health Safety and Security<br>+1- 503-286-7624   |
|---|---|
| 2. HAZARD(S) IDENTIFICATION                       |   |
| OSHA Haz Com: CFR 1910.1200:<br>WHMIS 2015:       | Skin Corrosion/Irritation [Category 2]<br>Eye Damage/Irritation [Category 2A]<br>Flammable Liquids [Category 4]   |
| Signal word:                                      | Warning!  |
| Hazard Statement(s):                              | Combustible liquid<br>Causes skin irritation<br>Causes serious eye irritation   |
| Pictogram(s) or Symbol(s):                        |   |
| Precautionary Statement(s):<br>[Prevention]       | Keep away from flames and hot surfaces. – No smoking. Wash hands and face thoroughly after handling. Wear protective gloves, eve protection.  |
| [Response]  | If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention.<br>Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for<br>several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation<br>persists: Get medical advice or attention. In case of fire: Use dry chemical, dry sand or foam to<br>extinguish. |
| [Storage]   | Store in a well-ventilated place. Keep cool.  |
| [Disposal]  | Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).  |
| Hazards not otherwise classified:                 | None.   |

**TCI AMERICA** 

SAFETY DATA SHEET

1,2-Bis(trimethylsilyloxy)cyclobutene

For laboratory research purposes. Not for drug or household use.

B1768

#### Hazards not otherwise classified: [HNOC]

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components: Percent: CAS RN: Molecular Weight: **Chemical Formula:** 

Substance 1,2-Bis(trimethylsilyloxy)cyclobutene >94.0%(GC) 17082-61-0 230.45 C10H22O2Si2

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) Responsible department:

| 4. FIRST-AID MEASURES  |   |  |  |
|--|---|--|--|
| Description of first aid measures<br>Inhalation:   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical  |  |  |
| Skin contact:  | advice/attention if you feel unwell.<br>Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If  |  |  |
| Eye contact:   | skin irritation or rash occurs: Get medical advice/attention.<br>Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.<br>Continue rinsing. If eye irritation persists: Get medical advice/attention.<br>Get medical advice/attention if you feel unwell. Rinse mouth.   |  |  |
| Ingestion:   |   |  |  |
| Symptoms/effects:<br>Acute:  | Redness.  |  |  |
| Delayed:   | No data available   |  |  |
| Indication of any immediate medical attention Not available.<br>Notes to physician:<br>No data available | ention:   |  |  |
| 5. FIRE-FIGHTING MEASURES  |   |  |  |
| Suitable extinguishing media:<br>Unsuitable extinguishing media:   | Dry chemical, foam, carbon dioxide.<br>Water (It may scatter and spread fire.)  |  |  |
| Specific hazards arising from the<br>chemical:   | Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.   |  |  |
| Hazardous combustion products:<br>Other specific hazards:  | These products include: Carbon oxides Silicates<br>Closed containers may explode from heat of a fire.   |  |  |
| Advice for firefighters:   | Wear self-contained breathing apparatus if possible.  |  |  |
| 6. ACCIDENTAL RELEASE MEASU  | RES   |  |  |
| Personal precautions, protective equipment and emergency procedures:                                     | Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.  |  |  |
| Environmental precautions:<br>Methods and materials for containment<br>and cleaning up:                  | Prevent product from entering drains.   |  |  |
| Prevention of secondary hazards:   | Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.   |  |  |
| 7. HANDLING AND STORAGE  |   |  |  |
| Precautions for safe handling:   | Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling.<br>Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. |  |  |
| Conditions for safe storage, including a<br>Storage conditions:  | Keep container tightly closed. Store in a cool, dark and well-ventilated place.   |  |  |
|  | Store under inert gas. Protect from moisture.<br>Store away from incompatible materials such as oxidizing agents.<br>Moisture-sensitive   |  |  |
| Packaging material:  | Comply with laws.   |  |  |
| 8. EXPOSURE CONTROLS / PERSC   | NAL PROTECTION  |  |  |
| Appropriate engineering controls:  | Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.   |  |  |

| Personal protective equipment |   |
|-------------------------------|---|
| Respiratory protection:       | Vapor respirator. Follow local and national regulations.          |
| Hand protection:              | Protective gloves.  |
| Eye protection:               | Safety glasses. A face-shield, if the situation requires.         |
| Skin and body protection:     | Protective clothing. Protective boots, if the situation requires. |
|                               |   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (20°C):<br>Form:<br>Colour:<br>Odour:<br>Odor threshold:<br>Odour threshold:  | Liquid<br>Clear<br>Colorless - Slightly pale<br>No data available<br>No data available<br>No data available      | yellow  |  |  |  |  |
|--|--|---|--|--|--|--|
| Melting point/freezing point:<br>Boiling point/range:<br>Decomposition temperature:<br>Relative density:<br>Kinematic viscosity:<br>Log Pow:               | No data available<br>59°C /0.3kPa (138°F)<br>No data available<br>0.90<br>No data available<br>No data available | pH:<br>Vapour pressure:<br>Vapour density:<br>Dynamic Viscosity:<br>Evaporation rate(Butyl<br>Acetate=1): | No data available<br>No data available.<br>No data available<br>No data available<br>No data available |  |  |  |
| Flash point:<br>Flammability(solid, gas):<br>Solubility(ies):<br>[Water]<br>[Other solvents]   | 61°C (142°F)<br>No data available<br>No data available<br>No data available                                      | Autoignition temperature:<br>Flammability or explosive limits:<br>Lower:<br>Upper:                        | No data available<br>No data available<br>No data available  |  |  |  |
| 10. STABILITY AND REACTIVITY   |  |   |  |  |  |  |
| Reactivity:<br>Chemical stability:<br>Possibility of hazardous reaction<br>Conditions to avoid:<br>Incompatible materials:<br>Hazardous decomposition prod | Open flame<br>Oxidizing agents<br>ucts: Carbon dioxide, Carbon   |   |  |  |  |  |

Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

**Respiratory or skin sensitization:** No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

IARC: No data available

ivaliable

No data available

**OSHA:** No data available

Reproductive toxicity: No data available

Target organ(s):

No data available

NTP:

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## 12. ECOLOGICAL INFORMATION

| Ecotoxicity:  |   |
|---|---|
| Fish:   | No data available   |
| Crustacea:  | No data available   |
| Algae:  | No data available   |
| Persistence / degradability:                        | No data available   |
| Bioaccumulative potential(BCF):<br>Mobility in soil | No data available   |
| Log Pow:  | No data available   |
| Soil adsorption (Koc):                              | No data available   |
| Henry's Law (PaM ³/mol):                            | No data available   |
| 13. DISPOSAL CONSIDERATIONS<br>Disposal of product: | Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil. |
| Disposal of container:                              | Dispose of as unused product. Do not re-use empty containers.   |
| Other considerations:                               | Observe all federal, state and local regulations when disposing of the substance.   |
| 14. TRANSPORT INFORMATION                           |   |
| DOT (US)  | Non-hazardous for transportation.   |
| ΙΑΤΑ  | Non-hazardous for transportation.   |

## 15. REGULATORY INFORMATION

## Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

Non-hazardous for transportation.

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

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#### **US Federal Regulations**

IMDG

| CERCLA Hazardous substance and Reportable Quantity: |               |  |  |  |  |
|---|---------------|--|--|--|--|
| SARA 313: Not Listed                                |               |  |  |  |  |
| SARA 302: Not Listed                                |               |  |  |  |  |
| State Regulations                                   |               |  |  |  |  |
| State Right-to-Know                                 |               |  |  |  |  |
| 5   |               |  |  |  |  |
| Massachusetts Not Listed                            |               |  |  |  |  |
| New Jersey Not Listed                               |               |  |  |  |  |
| Pennsylvania Not Listed                             |               |  |  |  |  |
| California Proposition 65: Not Listed               |               |  |  |  |  |
| Other Information                                   |               |  |  |  |  |
|   | assification: |  |  |  |  |
| Health: 0 Health                                    |               |  |  |  |  |
|   |               |  |  |  |  |
| Flammability: 2 Flamm                               | nability:     |  |  |  |  |
| Instability: 0 Physi                                | cal:          |  |  |  |  |

#### International Inventories

## 16. OTHER INFORMATION

#### Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or 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 chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.