

Revision number: 3 Revision date: 05/17/2016

1. IDENTIFICATION

Product name: Product code: Bis(trimethylsilyl)methane B1857

For laboratory research purposes.

Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number:

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

Transportation Emergencies:

+1-703-527-3887 (International) Responsible department:

Environmental Health Safety and Security

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

TCI America

+1-503-286-7624

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: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 2]

Signal word:

Danger!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation Highly flammable liquid and vapor

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye and face protection. Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting, and equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves, eye protection and face protection.

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

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3. COMPOSITION/INFORMATION ON INGREDIENTS

| S. COMPOSITION/INFORMATION | ON INOREDIENTS | | |
|---|--|--|-------------|
| Substance/Mixture: | Substance | | |
| Substance/Mixture: Substance Components: Bis(trimethylsilyl)methane Percent: >95.0%(GC) | | | |
| | | | CAS Number: |
| Molecular Weight: | 160.41 | | |
| • | C ₇ H ₂₀ Si ₂ | | |
| Chemical Formula: | G7H20SI2 Methylenebis(trimethylsilane) | | |
| Synonyms: | | | |
| 4. FIRST-AID MEASURES | | | |
| Inhalation: | Call a poison center or doctor if you feel unwell. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| Skin contact: | Call a poison center or doctor if you feel unwell. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| Eye contact: | IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects o exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| Ingestion: | Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| Symptoms/effects: | | | |
| Acute: Delayed: | Redness. No data available | | |
| Immediate medical attention: | If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| 5. FIRE-FIGHTING MEASURES | | | |
| Suitable extinguishing media: | Dry chemical, CO ₂ , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations. | | |
| Specific hazards arising from the che | | | |
| Hazardous combustion products: Other specific hazards: | These products include: Carbon oxides Silicates Closed containers may explode from heat of a fire. | | |
| have a very low flash point: Use of wate explosion hazard. Containers may explo | ght streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products r spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or de when heated. Move containers from fire area if you can do it without risk. | | |
| | fighters: reathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations actions. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may | | |
| | | | |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions: | Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark- proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn |
|--------------------------------|---|
| Personal protective equipment: | unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile). |

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6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Isolate area until gas has dispersed. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

| Precautions for safe handling: | Do NOT breath gas, fumes, vapor, or spray. Avoid contact with skin and eyes. Keep away from heat and |
|--------------------------------|--|
| | sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic |
| | charge. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. |
| Conditions for safe storage: | Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store under inert gas (e.g. Argon). Moisture sensitive. |
| Storage incompatibilities: | Combustible substances, Store away from oxidizing agents |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection:Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.Hand protection:Wear protective gloves.Eye protection:Splash goggles.Skin and body protection:Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (20°C): Form: Color: Odor: Odor threshold: | Liquid Clear Colorless - Almost colorless No data available No data available | | |
|--|---|--|--|
| Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity: | No data available 133°C (271°F) No data available 0.75 No data available | pH: Vapor pressure: Vapor density: Dynamic Viscosity: | No data available No data available No data available No data available |
| Partition coefficient: n-octanol/water (log P₀w) | No data available | Evaporation rate: (Butyl Acetate = 1) | No data available |
| Flash point: Flammability (solid, gas): | 12°C (54°F) No data available | Autoignition temper Flammability or exp Lower: Upper: | |

Solubility(ies):

constant (PaM3/mol)

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10. STABILITY AND REACTIVITY

| Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: | | ammable/explosive vapor-air mixture. ıre. Moisture sensitive. jents | | |
|--|---|---|--------------|-------------------------------------|
| 11. TOXICOLOGICAL INFORMATION | | | | |
| | | | | |
| 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 | NTP: | No data available | OSHA: | No data available |
| Reproductive toxicity: No data available | | | | |
| Routes of Exposure: Symptoms related to exposure: Skin contact may result in inflammation; char or dry skin. Eye contact may result in redness Potential Health Effects: Skin and eye contact may result in irritation. | acterized by itching, s or pain. | ntact, Ingestion, Skin contact. scaling, reddening, or occasionally blis | tering. Skin | contact may result in redness, pain |
| Target organ(s): | No data available | | | |
| 12. ECOLOGICAL INFORMATION | | | | |
| Factoriaity | | | | |
| Ecotoxicity Fish: | No data available | | | |
| Crustacea: | No data available | | | |
| Algae: | No data available | | | |
| Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient: n-octanol/water (log Pow) Soil adsorption (Koc): | No data available No data available No data available No data available No data available | | | |
| Henry's Law: | No data available | | | |

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| Disposal of prod | rules and reg chemical inci assistance bu regulatory co | ulations. You may be able to disso nerator equipped with an afterburn ut does not replace these laws, nor mpliance according to the law. US ted in 40 CFR Parts 261. The prod | or's responsibility to comply with Federal, State and Local live or mix material with a combustible solvent and burn in a er and scrubber system. This section is intended to provide does compliance in accordance with this section ensure EPA guidelines for Identification and Listing of Hazardous uct should not be allowed to enter the environment, drains, |
|--|--|---|--|
| Disposal of conta | | s unused product. Do not re-use er | npty containers. |
| Other considerat | ions: Observe all fe | ederal, state and local regulations | when disposing of the substance. |
| 14. TRANSPOR | RT INFORMATION | | |
| | | | |
| DOT (US) UN number: UN1993 | Proper Shipping Name: Flammable liquids, n.o.s. | Class or Division: 3 Flammable liquid | Packing Group: |
| I <mark>ATA</mark> UN number: UN1993 | Proper Shipping Name: Flammable liquid, n.o.s. | Class or Division: 3 Flammable liquid | Packing Group: II |
| MDG JN number: JN1993 | Proper Shipping Name: Flammable liquid, n.o.s. | Class or Division: 3 Flammable liquid | Packing Group: II |
| EmS number: | F-E, S-E | | |
| 15 REGULATO | DRY INFORMATION | | |

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

| SARA 313: | Not Listed |
|-----------|------------|
| SARA 302: | Not Listed |
| | |

State Regulations

| State Right | t-to-Know |
|-------------|-----------|
|-------------|-----------|

| Massachusetts | Not Listed |
|----------------------------|------------|
| New Jersey | Not Listed |
| Pennsylvania | Not Listed |
| California Proposition 65: | Not Listed |
| | |

Other Information

NFPA Rating:

| Health: | 2 |
|---------------|---|
| Flammability: | 3 |
| Instability: | 0 |

HMIS Classification:

| Health: | 2 |
|---------------|---|
| Flammability: | 3 |
| Physical: | 0 |

International Inventories

| WHMIS hazard class: | B2: Flammable Liquid. |
|---------------------|---|
| | D2B: Materials causing other toxic effects. (Toxic) |
| Canada: NDSL | On NDSL |
| EC-No: | 218-322-7 |
| | |

16. OTHER INFORMATION

Revision date: 05/17/2016 Revision number: 3

16. OTHER INFORMATION

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 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.