**SAFETY DATA SHEET**

Oakwood Products, Inc  
730 Columbia HWY N  
Estill, SC 29918  
www.oakwoodchemical.com

Phone Numbers:  
- Product Information: 803-739-8800  
- Transportation Emergency: 800-451-8346  
- Outside the USA: 760-602-8700

**MATERIAL IDENTIFICATION**

NAME: 4,4,5,5-Tetramethyl-1,3,2-dioxaborolane  
CAS#: [25015-63-8]  
CAT#: 010818  
For R&D use only.

**HAZARDS IDENTIFICATION**

**GHS Classification**  
Flammable liquids (Category 2)  
Substances And Mixtures Which, In Contact With Water, Emit Flammable Gases (Category 2)

**GHS Label elements, including precautionary statements**

**Pictograms**

![](flame)

**Signal Word** Danger

**Hazard Statement(s)**
- H225: Highly Flammable liquid and vapour  
- H261: In contact with water releases flammable gas  
- EUH014: Reacts violently with water  
- EUH018: In use may form flammable/explosive vapour-air mixture

**Precautionary Statement(s)**
- P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
- P231: Handle under inert gas.  
- P232: Protect from moisture.

**COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms**: Pinacolborane
**FIRST AID MEASURES**

**In case of eye contact**
Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

**In case of skin contact**
Wash thoroughly with soap and plenty of water. Seek medical attention.

**If inhaled**
Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

**If swallowed**
Do not induce vomiting. Give water to victim to drink. Seek medical attention.

**FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**
Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

**Special protective equipment for fire-fighters**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product**
emits toxic fumes under fire conditions.

**ACCIDENTAL RELEASE MEASURES**

**Personal precautions**
Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

**Environmental precautions**
Prevent further leakage if safe to do so.

**Methods and materials for containment and clean up**
Absorb spills on sand or vermiculite and place in closed container for disposal.

**HANDLING AND STORAGE**

**Precautions for safe handling**
Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.
Precautions for safe storage
Keep container tightly closed. Store in a cool, dry, well-ventilated area.
Moisture sensitive.
Keep cold.
Store cold 2-8°

EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Component Name (CAS)</th>
<th>Reference</th>
<th>ppm</th>
<th>mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethylamine (121-44-8)</td>
<td>OSHA</td>
<td>25</td>
<td>100</td>
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</table>

Personal protective equipment

Eye/face protection
Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection
Avoid all direct contact with product.
Wear chemical-resistant gloves.
Wear protective clothing and boots.
After contact with skin, wash immediately.

Respiratory protection
Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colorless liquid
Odour: no data available
Odour Threshold: no data available
Melting point/Freezing Point: no data available
Boiling Point: 42-43°C/50mm Hg
Flash Point: 11°C-closed cup
Evaporation Rate: no data available
Flammability (solid, gas): no data available
Upper/Lower Flammability or Explosive limits: no data available
Vapour pressure: no data available
Relative Density: 0.882
Solubility(ies): no data available
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: no data available
Decomposition temperature: no data available
Viscosity: no data available
Refractive Index: 1.3970
STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Reacts violently with water
In use may form flammable/explosive vapour-air mixture

Conditions to avoid
Moisture.
Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials
Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products
May evolve carbon monoxide, carbon dioxide, and boron oxides.

TOXICOLOGICAL INFORMATION

Acute toxicity
Inhalation LC50
Rat - 10.9 mg/l/4h (triethylamine)

Dermal LD50
Rabbit - 580 mg/kg (triethylamine)

Skin corrosion/irritation
Rabbit - Corrosive (triethylamine)

Serious eye damage/eye irritation
Rabbit - Risk of serious damage to eyes (triethylamine)

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

STOT-single exposure
no data available

STOT-repeated exposure
no data available

Aspiration hazard
no data available

Exposure Routes
Irritating to skin, eyes, and respiratory system.

4,4,5,5-Tetramethyl-1,3,2-dioxaborolane
May have harmful effects if inhaled or swallowed.

To the best of our knowledge, the health hazards of this material have not been fully investigated.

ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

DISPOSAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

TRANSPORT INFORMATION

**DOT**
Organometallic substance, liquid, water-reactive, flammable
4.3, 3
UN3399   II

**IMDG**
Organometallic substance, liquid, water-reactive, flammable
4.3, 3
UN3399   II
EMS-No: F-G, S-N
Marine Pollutant: No

**IATA**
Organometallic substance, liquid, water-reactive, flammable
4.3, 3
UN3399   II

REGULATORY INFORMATION

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components
SARA 313: The following chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313:

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New Jersey Right to Know Components
This product contains a chemical on the New Jersey Right to Know Components List.

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California Prop. 65 Components
This product does not contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

OTHER INFORMATION

Version : 1.5
Revision Date : 8/9/2019

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.