

## SAFETY DATA SHEET (SDS)

TBAOH

### 01. Product and Company Identification

**Product Identifier:**

**Trade Name:** Tetrabutylammonium Hydroxide  
**Chemical Name:** Tetrabutylammonium Hydroxide, TBAOH  
**Catalog Number:** 35071750, 35071709  
**Part of Kits:** 35070303, 35070401, 35070001  
**Use of chemical:** Laboratory chemical

**Identification of Manufacturer:**

**Manufacturer/Supplier:** Biochemical Diagnostics, Inc.  
 180 Heartland Blvd., Edgewood, NY 11717  
 Phone: (631) 595-9200 | Fax: (631) 595-9204  
**Emergency telephone number:** (800) 255-3924

### 02. Hazard(s) Identification

**Classification of substance or mixture:**

Flammable liquids (Category 2)  
 Acute toxicity, Oral (Category 3)  
 Acute toxicity, Inhalation (Category 3)  
 Acute toxicity, Dermal (Category 3)  
 Skin corrosion (Category 1B)  
 Serious eye damage (Category 1)  
 Specific target organ toxicity - single exposure (Category 1)

**Label elements:**

**Hazard pictograms**



Flammable    Poison    Health hazard    Corrosive

**Signal word:** Danger

**Hazard statements:**

H225 Highly flammable liquid and vapor.  
 H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled  
 H314 Causes severe skin burns and eye damage.  
 H370 Causes damage to organs.

**Precautionary statements:**

P210 Keep away from heat.  
 P233 Keep container tightly closed.  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
 P264 Wash skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P283 Wear fire/ flame resistant/ retardant clothing.  
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 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 physician.  
 P361 Remove/ Take off immediately all contaminated clothing.

## SAFETY DATA SHEET (SDS)

TBAOH

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Classification system:**

**NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 3  
Reactivity = 0

**HMIS-ratings (scale 0 - 4)**



Health = 3  
Fire = 3  
Reactivity = 0

### 03. Composition/information on ingredients

**Chemical Characterization:** Mixture

**CAS No. Description** : TBAOH: 2052-49-5, Methanol: 67-56-1

**Formula** : TBAOH, C<sub>16</sub>H<sub>37</sub>NO, 25% solution in Methanol

### 04. First aid measures

**Description of first aid measures:**

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion:** Rinse mouth with water. Seek medical attention.

**Skin Contact:** Remove contaminated clothing. Wash immediately with soap and water. Seek medical attention immediately.

**Eye Contact:** Rinse with thoroughly with plenty of water for at least 15 minutes. Seek medical attention immediately.

### 05. Firefighting measures



**Extinguishing media:** Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

**Special Fire Fighting Procedures:** Wear proper protective equipment w/Self contained breathing apparatus. Use water spray to cool unopened containers.

**Unusual Fire and Explosion Hazards:** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

## SAFETY DATA SHEET (SDS)

TBAOH

<b>06. Accidental release measures</b>
<p><b>Personal precautions, protective equipment and emergency procedures:</b> Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.</p>
<p><b>Environmental precautions:</b> Prevent further leakage if safe to do. Do not allow to enter sewers/surface or ground water.</p>
<p><b>Methods and material for containment and cleaning up:</b> Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations.</p>
<p><b>Waste Disposal Method:</b> Dispose in accordance with state, local and federal regulations</p>
<b>07. Handling and storage</b>
<p><b>Handling:</b></p> <p><b>Precautions for safe handling:</b> Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition.</p>
<p><b>Conditions for safe storage, including any incompatibilities:</b></p> <p><b>Requirements to be met by storerooms and receptacles:</b> Keep container tightly closed in a dry and well-ventilated place. Hygroscopic</p> <p><b>Further information about storage conditions:</b> Keep container upright to prevent leakage.</p>
<b>08. Exposure controls/ personal protection</b>
<p><b>Exposure Controls:</b></p> <p><b>Control parameters:</b> <b>Components with limit values that require monitoring at the workplace:</b> <b>67-56-2 Methanol</b>            PEL Long-term value: 260 mg/m<sup>3</sup>, 200 ppm            REL Long-term value: 260 mg/m<sup>3</sup>, 200 ppm            TLV Short-term value: 325 mg/m<sup>3</sup>, 250 ppm</p>
<p><b>Personal protective equipment:</b></p> <p><b>General protective and hygienic measures:</b> Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes, skin, and clothing.</p>
<p><b>Eye Protection:</b>  Tightly sealed safety glasses or face shield.</p>
<p><b>Skin Protection:</b> Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact</p> <p><b>Protection of Hands:</b>  Protective gloves</p> <p>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Dispose of gloves after use.</p>
<p><b>Respiratory Protection:</b> If the exposure limit is exceeded use NIOSH approved and tested full-face respirator that is independent of circulating air.</p>

## SAFETY DATA SHEET (SDS)

TBAOH

**Ventilation:** Keep vapor levels as low as possible, use adequate general or local exhaust.

### 09. Physical and chemical properties

**Appearance:**

**Form:** Liquid

**Color:** Colorless

**Odor:** Slight amine and alcohol

**pH:** >13

**Melting Point:** N/A

**Boiling Point:** 65°C (149 °F)

**Flash Point:** 11 °C (52 °F)

**Ignition temperature:** 470 °C (878 °F)

**Explosion limits: Lower:** N/A

**Upper:** N/A

**Vapor Pressure @ 20°C:** 97mm

**Specific Gravity @ 20°C (68°F):** 0.80

**Vapor Density:** N/A

**Percent Volatile:** N/A

**Evaporation Rate:** N/A

**Flammable Limits in air % by volume: Lel:** 6.7%

**Uel:** 36%

**Solubility in/ Miscibility with Water@25°C:** Miscible

### 10. Stability and reactivity

**Stability:** Stable

**Incompatibility:** Acids, Oxidizing agents, Alkali metals, Strong acids, Acid chlorides, Acid anhydrides, Reducing agents

**Conditions to Avoid:** Heat, flames and sparks. Extremes of temperature and direct sunlight.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition:** In fire conditions: Carbon monoxide and Nitrogen oxides

### 11. Toxicological information

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

No data available

**Potential health effects:**

**On the skin:** Causes skin irritation.

**On the eye:** Causes serious eye damage.

**Inhalation:** May cause irritation to respiratory tract.

**Ingestion:** May be harmful if swallowed, poison.

**SAFETY DATA SHEET (SDS)**

TBAOH

**12. Ecological information**

**Toxicity:** No data available.  
**Persistence and degradability:** No data available.  
**Bioaccumulative potential:** No data available.  
**Mobility in soil:** No data available.  
**Other adverse effects:** No data available.

**13. Disposal considerations****Waste treatment methods****Product:**

Dispose of in accordance with local, state and federal regulations.

**Contaminated packaging:**

Disposal must be made according to official regulations.

**14. Transport Information****UN Number:**

2924

**UN proper shipping name:**

Flammable liquids, corrosive, n.o.s. (Methanol, Tetrabutylammonium hydroxide)

**Transport hazard class(es):**

3 (8)

**Packing group:**

II

**Environmental hazards:**

None

**Special precautions**

None

**15. Regulatory Information****SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

The following components are subject to reporting levels established by SARA Title III, Section 313: Methanol CAS-No. 67-56-1 Revision Date 2007-07-01

**SARA 311/312 Hazards:**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**16. Other Information****Revision B, June 2015**

TBAOH

*The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, we make no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, we will not be responsible for damages of any kind resulting from the use of or reliance upon such information.*

*No representations, or warranties, either express or implied of merchantability fitness for a particular purpose or of any other nature made hereunder with respect to the information set forth herein or to the product which the information refers.*