

TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: Tetrabutylammonium Hydroxide (37% in Methanol)

Product code: T194

Product use:For laboratory research purposes.Restrictions on use:Not for drug or household use.

Company: TCI America

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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:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Eye

WHMIS 2015:

Eye Damage/Irritation [Category 1]
Toxic to Reproduction [Category 1B]

Specific Target Organ Toxicity (Single Exposure) [Category 1]

Specific Target Organ Toxicity (Single Exposure) [Category 3]
Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

Flammable Liquids [Category 2] Skin Corrosion/Irritation [Category 1B]

Signal word:

Danger!

Hazard Statement(s): Highly flammable liquid and vapor

Causes severe skin burns and eye damage May damage fertility or the unborn child

Causes damage to: Visual System Central Nervous System May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure: Visual System Central Nervous

System

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

[Response]

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. 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. If exposed: Call a poison center or doctor.

[Storage] [Disposal] Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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:

[HNOC]

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Mixture

Components: Tetrabutylammonium Hydroxide (37% in Methanol)

Percent: ...

 CAS RN:
 2052-49-5

 Molecular Weight:
 259.48

 Chemical Formula:
 C16H37NO

Synonyms: TBAOH (37% in Methanol)

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

Eye contact: 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.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Symptoms/effects:

Acute: Dizziness. Pain. Redness. Drowsiness.

Delayed: May have effects on the respiratory tract.

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water in large amounts, carbon dioxide.

Specific hazards arising from the

chemical:

Hazardous combustion products:
Other specific hazards:
These products include: Carbon oxides Nitrogen oxides
Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use extra personal protective equipment (self-contained breathing apparatus). 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.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Environmental precautions:

Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be

Prevention of secondary hazards:

promptly disposed of, in accordance with appropriate laws and regulations. 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 heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands

and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid all contact!

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store under inert gas. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Air-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: (Methanol)

ACGIH TLV(TWA):200 ppm (skin) ACGIH TLV(STEL):250 ppm (skin) OSHA PEL(TWA):200 ppm

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

pH:

Vapour density:

Acetate=1):

Dynamic Viscosity:

Evaporation rate(Butyl

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Clear

Colorless - Pale yellow

Odour: Characteristic
Odor threshold: No data available
Odour threshold: No data available

Melting point/freezing point: No data available

(Methanol) -98°C

Boiling point/range: No data available Vapour pressure:

(Methanol) 64°C **Decomposition temperature:** No data available

Relative density: No data available Kinematic viscosity: No data available

Log Pow: No data available

Log Pow: (Methanol) -0.82/-0.66

Flash point: No data available

(Methanol) 12°C

Flammability(solid, gas): No data available

Autoignition temperature: No data available

Flammability or explosive limits:

Lower: No data available
Upper: No data available

No data available

No data available.

No data available

No data available

No data available

Solubility(ies):

[Water] Soluble

Soluble: Toluene

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions:
Conditions to avoid:

No special reactivity has been reported.
Spark, Open flame, Static discharge

Incompatible materials: Oxidizing agents, Acid chlorides, Acid anhydrides, Strong bases, Reducing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

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

Target organ(s):

Causes damage to: Visual System Central Nervous System

May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure: Visual System Central Nervous System

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: Bioaccumulative potential(BCF):

Mobility in soil

No data available 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

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)

UN number: Proper Shipping Name: Class or Division: Subrisk(s): Packing Group: UN2924 Flammable liquids, corrosive, n.o.s

3 Flammable liquid 8 Corrosive material

IATA

Subrisk(s): UN number: **Proper Shipping Name:** Class or Division: **Packing Group:**

UN2924 Flammable liquid, corrosive, n.o.s 3 Flammable liquid 8 Corrosive material

IMDG

UN2924 **Proper Shipping Name:** Class or Division: Subrisk(s): **Packing Group:** UN

Flammable liquid, corrosive, n.o.s 3 Flammable liquid 8 Corrosive material numb

er:

EmS number: F-E, S-C

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

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-to-Know

Not Listed Massachusetts Not Listed **New Jersey** Not Listed Pennsylvania California Proposition 65: Not Listed

Other Information

NFPA Rating: **HMIS Classification:**

3 Health: Health: Flammability: 3 Flammability: 3 Instability: Physical: 0

International Inventories

Canada: DSL On DSL EC-No: 218-147-6

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.