

TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: Hexadecyltrimethylammonium Chloride

Product code: H0082

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: Acute Toxicity - Oral [Category 4]

WHMIS 2015: Skin Corrosion/Irritation [Category 2]

Eye Damage/Irritation [Category 2A]

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

Aquatic Hazard (Acute) [Category 1]
Aquatic Hazard (Long-Term) [Category 1]

Signal word: Warning!

Hazard Statement(s): Harmful if swallowed

Causes skin irritation
Causes serious eye irritation
Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

May cause respiratory irritation.

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage]

[Disposal]

Prevention] Avoid breathing dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands and face

release to the environment. Do not eat, drink or smoke when using this product, wash hands and lace

thoroughly after handling. Wear protective gloves, eye protection.

If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. 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. Collect spillage.

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 in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Hexadecyltrimethylammonium Chloride

 Percent:
 >95.0%(T)

 CAS RN:
 112-02-7

 Molecular Weight:
 320.00

 Chemical Formula:
 C19H42CIN

Synonyms: Cetyltrimethylammonium Chloride, CTAC, HTAC

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. Call a POISON

CENTER or doctor/physician if you feel unwell.

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

skin irritation or rash occurs: Get medical advice/attention.

Eye contact: 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/attention.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Symptoms/effects:

Acute: Redness.

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 spray, carbon dioxide.

Specific hazards arising from the

chemical:

Hazardous combustion products:

Other specific hazards:

These products include: Carbon oxides Nitrogen oxides Halogenated compounds

WARNING: Highly toxic HCl gas is produced during combustion.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions:

Methods and materials for containment

and cleaning up:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

dispersion of dust. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

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. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Hygroscopic

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. 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): Solid

Form: Crystal - Powder
Colour: White - Almost white
Odour: No data available
Odor threshold: No data available
Odour threshold: No data available

Melting point/freezing point: 234°C (453°F) No data available pH: No data available No data available. Boiling point/range: Vapour pressure: **Decomposition temperature:** No data available Vapour density: No data available No data available **Dynamic Viscosity:** Relative density: No data available

Kinematic viscosity: No data available

Log Pow:No data availableEvaporation rate(ButylNo data available

Acetate=1):

Flash point: No data available Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

Solubility(ies):

[Water] No data available [Other solvents] No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents

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

11. TOXICOLOGICAL INFORMATION

RTECS Number: ML9145000

Acute Toxicity:

orl-mus LDLo:400 mg/kg skn-rbt LD50:4300 uL/kg/24H

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

oms-ham-lng 3600 ug/L

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s):

May cause respiratory irritation.

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:
 3.23

 Soil adsorption (Koc):
 2.2 x 10⁵

 Henry's Law (PaM ³/mol):
 3.0 x 10⁻⁵

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) UN3077

UN number: Proper Shipping Name:

Environmentally hazardous substance,

solid, n.o.s

Class or Division: **Packing Group:** 9 Miscellaneous hazardous

material

IATA

Proper Shipping Name: UN number:

UN3077 Environmentally hazardous substance,

solid, n.o.s

Class or Division: Packing Group:

9 Miscellaneous hazardous

material

<u>IMDG</u>

UN3077 **Proper Shipping Name:** UN

numb Environmentally hazardous substance,

solid, n.o.s er:

Class or Division: **Packing Group:**

9 Miscellaneous hazardous

material

EmS number: F-A, S-F

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 Not Listed

SARA 302:

State Regulations State Right-to-Know

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

Other Information

HMIS Classification: NFPA Rating: Health: Health: 2 Flammability: 0 Flammability: 0 0 Instability: Physical:

International Inventories

Canada: DSL On DSL EC-No: 203-928-6

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.