



AccuStandard®, Inc.

125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

Emergency Contact Information:

AccuStandard, Inc.
1-203-786-5290

Hours: Monday to Friday 8:00am to 5:00pm EST

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: BIOC-105N
Description: Tributyltetradecylphosphonium chloride
CAS No.: 81741-28-8

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

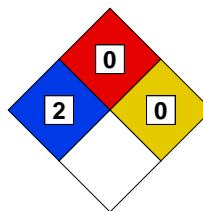
Email: edocs@accustandard.com

1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-786-5290
Hours: Monday to Friday 8:00am to 5:00pm EST

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements



*	2	HEALTH
0		FLAMMABILITY
0		PHYSICAL HAZARD

Signal Word: Danger

Hazard Codes:

- H302 - Harmful if swallowed. (Acute toxicity, oral, category 4)
- H314 - Causes skin burns. (Skin corrosion/irritation, category 1)
- H318 - Causes eye burns. (Category 1)
- H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)
- H371 - May cause lung damage. (Specific target organ toxicity - single exposure, inhalation) Category 2

Precautionary Codes:

- P202 - This product should only be used by persons trained in the safe handling of hazardous chemicals.
- P262 - Do not get in eyes, on skin or clothing.
- P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.
- P280 - Protective gloves must be worn to prevent skin contact.

SECTION 2 - HAZARDS IDENTIFICATION - continued**2.1 - GHS Label Elements** - continued

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

P331 - Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

P404 - Store in a tightly closed container.

2.2 - Other Hazards**2.2.1 - Symptom of Exposure Health/Environment**

Corrosive.

Causes burns.

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.

May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

May cause gastro-intestinal disturbances and lung irritation, chest pain and edema which may be fatal.

May cause lung damage. (Specific target organ toxicity - single exposure, inhalation) Category 2

May cause eye damage.

2.2.2 - Potential Health Effects

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Harmful if swallowed. (Acute toxicity, oral, category 4)

Causes eye burns. (Category 1)

Causes skin burns. (Skin corrosion/irritation, category 1)

Extremely destructive to tissue of the mucous membranes and upper respiratory tract.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

This product is or contains a component that is not listed (ACGIH, IARC, NTP, OSHA) as a cancer causing agent.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Tributyltetradecylphosphonium chloride

Synonyms: N/A

Molecular Weight: 435.15

Molecular Formula: C₂₆H₅₆ClP

SECTION 3 - COMPOSITION / ANALYTES DATA - continued

Analyte	CAS Number	% Concentration	ACGIH -TLV (mg/m ³)			OSHA -PEL (mg/m ³)		
			TWA	STEL	Skin	TWA	STEL	Skin
Tributyltetradecylphosphonium chloride	81741-28-8	100.000						

SECTION 4 - FIRST AID MEASURES**4.1 - First Aid Procedures - General**

Get medical assistance for all cases of overexposure.

4.2 - Eye Contact

Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. (P338)

4.3 - Skin Contact

Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists. (P352)

4.4 - Inhalation

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. (P340)

4.5 - Ingestion

Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs. (P331)

SECTION 5 - FIRE FIGHTING MEASURES**5.1 - Flammable Properties**

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.2 - Extinguishing Media

Use any extinguishing media suitable for adjacent material.

5.3 - Protection of Firefighters

As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES**6.1 - Spill Response**

Wear a self-contained breathing apparatus and appropriate Personal protection. Prevent contact with skin or eyes. Ventilate area. Stop leak if you can do so without risk. Absorb on sand or vermiculite, take up and containerize for proper disposal. Flush spill area with water. Comply with Federal, State, and local regulations.

SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container. (P404)

Avoid breathing vapors or mists.

Use with adequate ventilation. (P271)

Do not get in eyes, on skin or clothing. (P262)

Avoid prolonged or repeated exposure.

SECTION 7 - HANDLING AND STORAGE - continued

This product should only be used by persons trained in the safe handling of hazardous chemicals. (P202)
Keep refrigerated.

SECTION 8 - EXPOSURE CONTROLS**8.1 - Engineering Controls/PPE**

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available. (P264)

8.2 - General Hygiene Considerations

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

Material must be handled or transferred in an approved fume hood or with equivalent ventilation.

Protective gloves must be worn to prevent skin contact. (P280)

(Chloroprene or equivalent)

Safety glasses with side shields must be worn at all times.

Impervious protective clothing should be worn to prevent skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Crystalline solid

Odor: N/A

Odor Threshold: N/A

pH: N/A

Melting Point: N/A

Boiling Point: N/A

Flash Point: Noncombustible

Evaporation Rate (Butyl Acetate=1): N/A

Flammability Class: N/A

Lower Flammability Level: N/A

Upper Flammability Level: N/A

Vapor Pressure: N/A

Vapor Density (Air = 1): N/A

Specific Gravity: N/A

Solubility in Water: N/A

Partition Coefficient: N/A

Autoignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

VOC Content: N/A

Percent Volatile: N/A

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Oxidizers

Hazardous Decomposition: Oxides of carbon and phosphorous; Hydrogen chloride

Hazardous Polymerization: Will not occur

Condition to Avoid: Extreme heat

SECTION 11 - TOXICOLOGICAL INFORMATION**Human Health Toxicity**

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific health toxicity information is available for this product.

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION**Environmental Toxicity**

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION**Transportation Information (DOT/IATA)**

UN Number: UN3261

UN Shipping Class: 8

UN Packing Group: II

UN Proper Shipping Name: Corrosive solid, acidic, organic, n.o.s. (Tributyltetradecylphosphonium chloride)

Poison by Inhalation: No

Marine Pollutant: No

SECTION 15 - REGULATORY INFORMATION

This product is NOT subject to SARA section 313 reporting requirements.

The CAS number of this product is NOT listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

SECTION 15 - REGULATORY INFORMATION - *continued*

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

**NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY
RESULTING FROM ITS USE.**

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

- 0 - Minimal
- 1 - Slight
- 2 - Moderate
- 3 - Serious
- 4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

- Category 1 - Most Severe
- Category 5 - Least Severe

**** End of Document ****