

Section 1. Product and Company Identification

Product Name Tributylamine
CAS Number 102-82-9

Parchem - fine & specialty chemicals
415 Huguenot Street
New Rochelle, NY 10801
☎ (914) 654-6800 ☎ (914) 654-6899
🌐 parchem.com ✉ info@parchem.com

EMERGENCY RESPONSE NUMBER
CHEMTEL
Toll Free US & Canada: 1 (800) 255-3924
All other Origins: 1 (813) 248-0585
Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4): H227
Acute toxicity, Oral (Category 4): H302
Acute toxicity, Inhalation (Category 1): H330
Acute toxicity, Dermal (Category 2): H310
Skin irritation (Category 2): H315
Acute aquatic toxicity (Category 2): H401

GHS Label Elements

Pictograms:



Signal word: DANGER

Hazard and precautionary statements

Hazard Statements

H227: Combustible liquid.
H302: Harmful if swallowed.
H310 + H330: Fatal in contact with skin or if inhaled
H315: Causes skin irritation.
H401: Toxic to aquatic life.

Precautionary Statements

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing.



- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink, or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/eye protection/face protection.
- P284: Wear respiratory protection.
- P301 + P312 + P330: If swallowed: Call a poison center or doctor/physician if you feel unwell. Rinse mouth.
- P302 + P350 + P310: If on skin: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
- P302 + P352: If on skin: Wash with plenty of soap and water.
- P304 + P340 + P310: If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.
- P332 + P313: If skin irritation occurs: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P370 + P378: In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish.
- P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235: Store in a well-ventilated place. Keep cool.
- P405: Store locked up.
- P501: Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition / Information on Ingredients

Common Name Tributylamine
Synonym(s) Tri-n-butylamine
Formula C₁₂H₂₇N
CAS Number 102-82-9

COMPONENT	CAS NUMBER	CONCENTRATION
Tributylamine	102-82-9	<= 100%

Section 4. First Aid Measures

Description of first-aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Eye contact: Flush eyes with water as a precaution.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.



Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed: No data available

Section 5. Firefighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides, Nitrogen oxides (NO_x)

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

Further information: Use water spray to cool unopened containers

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see section 13

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Hygroscopic.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

Section 8. Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values. Hazardous components without workplace control parameters

Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term systemic effects	15.2 mg/m ³
Workers	Inhalation	Long-term local effects	15.2 mg/m ³

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	3.37 mg/kg
Marine water	0.00036 mg/l
Fresh water	0.0036 mg/l
Marine sediment	1.69 mg/kg
Fresh water sediment	16.9 mg/kg
Sewage treatment plant	100 mg/l
Aquatic intermittent release	0.036 mg/l

Exposure controls

Appropriate engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance: Colorless liquid

Odor: unpleasant

Odor Threshold: No data available

pH: 10.2 at 0.1 g/l at 25°C (77°F)

Melting point/freezing point: Melting point/range: -70°C (-94°F) - lit.

Initial boiling point and boiling range: 216°C (421°F) - lit.

Flash point (Closed Cup): 63°C (145°F)

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits

Upper explosion limit: 6% (V)

Lower explosion limit: 1.4% (V)

Vapor pressure: 3.2 hPa (2.4 mmHg) at 55°C (131°F)

Vapor density: 6.4 - (Air = 1.0)

Relative density: 0.778 g/mL at 25°C (77°F)

Water solubility: 80 g/l at 20°C (68°F) - OECD Test Guideline 105 - slightly soluble

Partition coefficient (n-Octanol/water): log Pow: 3.338 at 25°C (77°F)

Auto-ignition temperature: 210 °C (410 °F) at 1,015 hPa (761 mmHg)

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Other safety information

Surface tension: 55 mN/m at 20°C (68°F)

Relative vapor density: 6.4 - (Air = 1.0)

Section 10. Stability and Reactivity

Reactivity: No data available

Chemical stability: stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: Heat, flames, and sparks.

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products

Other decomposition products: No data available

In the event of fire: see section 5

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral: Rat - male - 420 mg/kg

LC50 Inhalation: Rat - male and female - 4 h - 0.5 mg/l (OECD Test Guideline 403)

LD50 Dermal: Rabbit - male - 195 mg/kg

Skin corrosion/irritation

Skin: Rabbit

Result: Irritating to skin.

Serious eye damage/eye irritation

Eyes: Rabbit

Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitization

Buehler Test: Guinea pig

Result: Does not cause skin sensitization.

Germ cell mutagenicity

Ames test: Salmonella typhimurium

Result: negative

OECD Test Guideline 474

Mouse: male and female

Result: negative

Carcinogenicity

IARC: No components of this product, present at levels greater than or equal to 0.1%, is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No components of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available



Aspiration hazard: No data available

Additional Information

RTECS: YA0350000

CNS stimulation., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Section 12. Ecological Information

Toxicity

Toxicity to fish

static test LC50: *Oryzias latipes* - 16.3 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50: *Daphnia magna* (Water flea) - 8 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae

Static test EC50: *Desmodesmus subspicatus* (*Scenedesmus subspicatus*) - 3.6 mg/l - 72 h

Persistence and degradability

Biodegradability

Aerobic: Exposure time 29 d

Result: 80.3% - Readily biodegradable (OECD Test Guideline 301B)

Bio accumulative potential: Accumulation in aquatic organisms is unlikely.

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)

UN number: 2542

Class: 6.1

Packing group: II

Proper shipping name: Tributylamine



Poison Inhalation Hazard: No

IMDG

UN number: 2542

Class: 6.1

Packing group: II

EMS-No: F-A, S-A

Proper shipping name: Tributylamine

IATA

UN number: 2542

Class: 6.1

Packing group: II

Proper shipping name: Tributylamine

Section 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: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard

Massachusetts Right to Know Components

Tributylamine (CAS-No. 102-82-9)

Pennsylvania Right to Know Components

Tributylamine (CAS-No. 102-82-9)

New Jersey Right to Know Components

Tributylamine (CAS-No. 102-82-9)

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

HMIS Rating

Health: 4

Flammability: 2

Reactivity: 0

NFPA Rating

Health: 3

Flammability: 2

Reactivity: 0



Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 3/1/2016

