

# **MATERIAL SAFETY DATA SHEET**

TERT-BUTYL ALCOHOL  
CAROLINA BIOLOGICAL

---

## **1. PRODUCT DESCRIPTION**

Product Name: Tert-Butyl Alcohol  
Product Code(s): 84-9850  
Size: 500ml, 4L, 20L  
Chemical Name: 2-Methyl-2-Propanol  
CAS Number: 75-65-0  
Formula: (CH<sub>3</sub>)<sub>3</sub>COH  
Synonyms: Trimethyl carbinol, T-Butyl alcohol, T-Butanol  
Distributor: Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)  
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

## **2. COMPOSITION/INFORMATION ON INGREDIENTS**

Principal Hazardous Components: Tert-Butyl Alcohol (CAS# 75-65-0) 90-100%  
TLV and PEL units: ACGIH-TLV 100ppm (TWA)  
OSHA-PEL 100ppm (TWA)

## **3. HAZARD IDENTIFICATION**

Emergency Overview: Avoid breathing vapors.  
Potential Health Effects:  
Eyes: May cause irritation.  
Skin: May cause irritation.  
Ingestion: May cause gastrointestinal discomfort.  
Inhalation: May cause irritation to respiratory tract.

## **4. FIRST AID MEASURES**

Emergency and First Aid Procedures:  
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.  
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.  
Ingestion - If swallowed, if conscious, give plenty of water. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.  
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

## **5. FIREFIGHTING PROCEDURES**

Flash Point (Method Used): 11C (cc)  
NFPA Rating: Health: 1  
Fire: 3  
Reactivity: 0

Extinguisher Media:

Use dry chemical, CO<sub>2</sub> or appropriate foam.

Flammable Limits in Air % by Volume: 8% upper 2.35% lower

Autoignition Temperature: 477C

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapors may flow along surfaces to

# **MATERIAL SAFETY DATA SHEET**

TERT-BUTYL ALCOHOL  
CAROLINA BIOLOGICAL

---

distant ignition sources and flash back.

## **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Eliminate all sources of ignition.  
Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

## **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Store in a tightly closed container in a dry, cool, well-ventilated area suitable for flammable liquids.

Other Precautions: Bond and ground containers when transferring liquid.

## **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes  
Mechanical(General): Yes  
Special: No  
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

## **9. PHYSICAL DATA**

Molecular Weight: 74.14

Melting Point: 25C

Boiling Point: 83C

Vapor Pressure: 31 at 20C

Vapor Density(Air=1): 2.6

Specific Gravity(H2O=1): 0.78

Percent Volatile by Volume: 100%

Evaporation Rate(H2O=1): No data available

Solubility in Water: Complete

Appearance and Odor: Colorless crystals or liquid with a camphor-like odor.

## **10. REACTIVITY DATA**

Stability: Stable

Conditions to Avoid: Heat, flame, or other sources of ignition.

Incompatibility(Materials to Avoid): Strong oxidizing agents

Hazardous Decomposition Products: COx

Hazardous Polymerization: Will not occur

## **11. TOXICITY DATA**

Toxicity Data: Not listed as causing cancer by NTP, IARC, or OSHA.

Effects of Overexposure:

Acute: See section 3

Chronic: orl-rat LD50: 3500 mg/kg

# MATERIAL SAFETY DATA SHEET

TERT-BUTYL ALCOHOL  
CAROLINA BIOLOGICAL

---

Conditions Aggravated by Overexposure: None identified  
Target Organs: Eyes, skin  
Primary Route(s) of Entry: Inhalation, ingestion, eye and skin contact

## **12. ECOLOGICAL DATA**

EPA Waste Numbers: D001, Ignitable waste

## **13. DISPOSAL INFORMATION**

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.  
Always contact a permitted waste disposer (TSD) to assure compliance.

## **14. TRANSPORT INFORMATION**

Description: Butanols, 3, UN1120, II

## **15. REGULATORY INFORMATION**

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals Name Chemical List Category	CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
--	-----------------------------	--	-------------------------------	------------------------

---

Tert-Butyl Alcohol	No	Yes	No	No	No
--------------------	----	-----	----	----	----

## **16. ADDITIONAL INFORMATION**

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

### Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

NTP.....National Toxicology Program

OSHA.....Occupational Safety and Health Administration

PEL.....Permissible Exposure Limit

ppm.....parts per million

RCRA.....Resource Conservation and Recovery Act

SARA.....Superfund Amendments and Reauthorization Act

TLV.....Threshold Limit Value

TSCA.....Toxic Substances Control Act