

# Chem Service Inc. Material Safety Data Sheet

Last Revised On: 10/28/2011

## SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Catalog Number: S-13744T1  
Description: Vernolate  
Product is: Solution  
Other Name(s): Vernolate

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026  
EMERGENCY PHONE: 1-610-692-3026

## SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS No.: 1929-77-7  
Description: Vernolate Solution  
Concentration: 100ug/mL in tert-Butyl methyl ether  
EINECS No.: 217-681-7  
Hazard Symbols: Xn

## SECTION 3 - HAZARDS IDENTIFICATION

Contact lenses should not be worn in the laboratory. All chemicals should be considered hazardous - Avoid direct physical contact!

For the solvent: tert-Butyl methyl ether

Health Risks: Can cause skin irritation. May be fatal if swallowed! Inhalation may be FATAL as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. May be harmful by inhalation, ingestion, or skin absorption. Vapors or mist is irritating to eyes, mucous membranes and upper respiratory tract.

Property 65: Data Not Available

## SECTION 4 - FIRST AID MEASURES

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

For the solvent: tert-Butyl methyl ether

First Aid: In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes. If patient has stopped breathing administer artificial respiration. If patient is in cardiac arrest administer CPR. Continue life supporting measures until medical assistance has arrived. Remove and wash contaminated clothing. If swallowed, rinse out mouth with water, providing the person is conscious. If no burns have occurred-use soap and water to cleanse skin. If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing.

## SECTION 5 - FIRE AND EXPLOSION DATA

For the solvent: tert-Butyl methyl ether

Flash Point: -28°C This is a flammable chemical.  
Extinguishing Media: Carbon dioxide, dry chemical powder or spray.  
Upper Explosion Limit: 15.1%  
Lower Explosion Limit: 1.6%  
Autoignition Temperature: 224°C

NFPA Scale: 0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Severe  
NFPA Hazard Rating: Health: 2, Reactivity: 0, Flammability: 3

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills or Leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area.  
Data Not Available

## SECTION 7 - HANDLING AND STORAGE

Handling: This chemical should be handled only in a hood. Eye shields should be worn.  
Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.  
Storage:  
Store in a cool dry place. Store only with compatible chemicals.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (TWA): Data Not Available  
ACGIH TLV (TWA): Data Not Available  
ACGIH TLV (STEL): Data Not Available  
Personal Protective Equipment  
Eyes: Wear Safety Glasses.  
Skin: Wear appropriate protective gloves to prevent skin exposure.  
Clothing: Wear appropriate protective clothing to minimize contact with skin.  
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant the use of a respirator.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

For the solvent: tert-Butyl methyl ether

Color: Colorless  
Phase: Liquid  
Melting Point: -109°C  
Boiling Point: 55.2°C  
Specific Gravity: 0.7404g/mL @ 20°C  
Vapor Density: 3.1  
Vapor Pressure: 279.2hPa @ 20°C  
Solubility in Water: Slightly soluble  
Odor: Ether like  
Evaporation Rate (Butyl acetate=1): Data Not Available  
Molecular Weight: 88.17  
Molecular Formula: C<sub>5</sub>H<sub>12</sub>O

## SECTION 10 - STABILITY AND REACTIVITY

Easily oxidized-May be a peroxide former-Check for peroxides on all opened samples. Flammable. Incompatible with strong acids. Incompatible with strong oxidizing agents. Decomposition liberates toxic fumes. Container may explode under fire conditions. Vapors may travel considerable distance to source of ignition and flash back. Forms explosive mixture in air.

## SECTION 11 - TOXICOLOGY INFORMATION

Since this solution contains a very low concentration of active component, the primary hazard is from the solvent.

RTECS:	KN5250000
Oral Rat or Mouse LD50:	4000.0 mg/kg
Dermal Rat or Mouse LD50:	N/A mg/kg
Rat or Mouse LC50 :	23576 ppm/4H
<u>Carcinogenicity</u>	
OSHA:	NO
IARC:	NO
NTP:	NO
ACGIH:	NO
NIOSH:	NO
Other:	NO

Property 65: Data Not Available

## SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not Available  
Environmental Fate: Not Available

## SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal: Dispose in accordance with Federal, State and Local regulations

## SECTION 14 - TRANSPORTATION INFORMATION

UN Number:	UN2398
Class:	3
Packing Group:	II
Proper Shipping Name:	Methyl tert-butyl ether

## SECTION 15 - REGULATORY INFORMATION

For the solvent: tert-Butyl methyl ether

Risk Phrases:

-R11: Highly Flammable.  
-R37/38: Irritating to respiratory system and skin.  
-R40/41: Error finding Risk information

Safety Phrases:

-S16: Keep away from sources of ignition - No smoking.  
-S33: Take precautionary measures against static discharges.  
-S9: Keep container in a well ventilated place.

## **SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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