

Butyl Carbitol

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## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Butyl Carbitol**

Product Code(s) : Not available.

Recommended use of the chemical and restrictions on use

: Antifreeze; Plasticiser; Solvent  
Use pattern: Professional Use Only  
Restriction on use: None known

Chemical family : Aliphatic ether alcohol

Name, address, and telephone number  
of the supplier:

**Comet Chemical Company Ltd.**

3463 Thomas Street

Innisfill, ON, Canada

L9S 3W4

Supplier's Telephone # : 705-436-5580

24 Hr. Emergency Tel # : TERRRAPURE ENVIRONMENTAL : 800-567-7455

Name, address, and telephone number of  
the manufacturer:

Refer to supplier

### SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear colourless liquid. Ether like odour.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification :

Flammable Liquid - Category 4  
Serious eye damage/eye irritation - Category 2A

Label elements

Hazard pictogram(s)



Signal Word

Warning!

Hazard statement(s)

Combustible liquid.  
Causes serious eye irritation.

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**SAFETY DATA SHEET***Precautionary statement(s)*

Keep away from flames and hot surfaces. - No smoking.  
Wash hands thoroughly after handling.  
Wear protective gloves and eye/face protection.

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/attention.

In case of fire: Use water fog, dry chemical, CO<sub>2</sub> or 'alcohol' foam for extinction.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

Other hazards which do not result in classification:

May cause skin and respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Pure substance

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration</u>
Ethanol, 2-Butoxyethoxy	Diethylene glycol monobutyl ether; DEGBE	112-34-5	100.00

**SECTION 4. FIRST-AID MEASURES****Description of first aid measures**

- Ingestion* : Call a physician or poison control centre immediately. Induce vomiting ONLY under the direct supervision of qualified medical personnel or a poison control centre. Never give anything by mouth to an unconscious person.
- Inhalation* : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. Get medical attention if symptoms persist.
- Skin contact* : Immediately flush with plenty of water, while removing contaminated clothing. If irritation persists, seek prompt medical attention. Launder clothing before reuse.
- Eye contact* : Immediately flush eye(s) with plenty of water. After initial flushing, remove any contact lenses if worn, and continue flushing for at least 5 to 10 minutes. If irritation persists, seek prompt medical attention.

**Most important symptoms and effects, both acute and delayed**

- : Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct skin contact may cause slight or mild, transient irritation. Inhalation of high concentrations may cause dizziness, disorientation, incoordination, narcosis, nausea or narcotic effects.

**Indication of any immediate medical attention and special treatment needed**

- : Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing media**

- Suitable extinguishing media* : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

- Unsuitable extinguishing media* : Do not use a solid water stream as it may scatter and spread fire.

**Special hazards arising from the substance or mixture / Conditions of flammability**

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- : Burning produces obnoxious and toxic fumes. Combustible liquid and vapor. Vapors are heavier than air and will settle and collect in low areas and pits, displacing breathing air.

### Flammability classification (OSHA 29 CFR 1910.106)

- : Flammable Liquid - Category 4

### Hazardous combustion products

- : Carbon oxides, formaldehyde and other irritating fumes and smoke.

### Special protective equipment and precautions for firefighters

#### *Protective equipment for fire-fighters*

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

#### *Special fire-fighting procedures*

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

- : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

### Environmental precautions

- : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply.

### Methods and material for containment and cleaning up

- : Ventilate the area. Stop spill or leak at source if safely possible. Dike for water control. Use only non-sparking tools. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13).

### Special spill response procedures

- : In case of transportation accident, contact TERRAPURE ENVIRONMENTAL at 1-800-567-7455.  
US CERCLA Reportable quantity (RQ): None.

## SECTION 7. HANDLING AND STORAGE

### Precautions for safe handling

- : Wear protective gloves and eye/face protection. Keep away from heat and open flames. - No smoking. Use with adequate ventilation. Do not breathe mist or vapor. Avoid contact with eyes, skin and clothing. Wash with soap and water after handling. Keep away from acids and other incompatibles. Keep containers tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

### Conditions for safe storage

- : Store in a cool, dry, well-ventilated area. Store away from areas of excessive heat, open flames, sparks, and other possible sources of ignition. Keep away from incompatibles. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.

### Incompatible materials

- : Strong oxidizing agents; Strong acids; Strong bases; calcium hypochlorite; Perchloric acid.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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<u>Exposure Limits:</u>				
<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Ethanol, 2-Butoxyethoxy	100 mg/m <sup>3</sup> (inhalable) (vapor)	N/Av	N/Av	N/Av

### Exposure controls

#### Ventilation and engineering measures

: Use sufficient mechanical ventilation to maintain exposures below the TLV. Use local exhaust if mist or spray is generated.

#### Respiratory protection

: Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Seek advice from respiratory protection specialists. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.

#### Skin protection

: Wear appropriate chemical resistant gloves. Advice should be sought from glove suppliers.

#### Eye / face protection

: Chemical goggles are recommended when there is a potential for splashing.

#### Other protective equipment

: Emergency showers and eyewash facilities should be nearby. Wear a chemically resistant apron and long sleeves when dispensing, to prevent skin contact.

#### General hygiene considerations

: Do not breathe mist or vapor. Avoid contact with eyes, skin and clothing. When using do not eat or drink. When using do not smoke. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	: Clear, colourless liquid.
<b>Odour</b>	: Ether like odour.
<b>Odour threshold</b>	: N/Av
<b>pH</b>	: N/Av
<b>Melting/Freezing point</b>	: -68.1°C(-90.58°F)
<b>Initial boiling point and boiling range</b>	: 230.4°C (446.72°F)
<b>Flash point</b>	: 78°C (172.4°F)
<b>Flashpoint (Method)</b>	: closed cup
<b>Evaporation rate (BuAe = 1)</b>	: N/Av
<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Lower flammable limit (% by vol.)</b>	: Not available.
<b>Upper flammable limit (% by vol.)</b>	: Not available.
<b>Oxidizing properties</b>	: None known.
<b>Explosive properties</b>	: Not explosive
<b>Vapour pressure</b>	: 0.003 kPa
<b>Vapour density</b>	: 5.58
<b>Relative density / Specific gravity</b>	: 0.95
<b>Solubility in water</b>	: Complete
<b>Other solubility(ies)</b>	: Soluble in most organic solvents.

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**Partition coefficient: n-octanol/water or Coefficient of water/oil distribution**

: 1

**Auto-ignition temperature** : 204°C (399.2°F)

**Decomposition temperature** : Not available.

**Viscosity** : Not available.

**Volatiles (% by weight)** : No information available.

**Volatile organic Compounds (VOC's)**

: N/Av

**Absolute pressure of container**

: N/Av

**Flame projection length** : N/Av

**Other physical/chemical comments**

: Molecular formula: C8-H18-O3  
Molecular Weight: 162.23 g/mol

### SECTION 10. STABILITY AND REACTIVITY

**Reactivity** : Not normally reactive.

**Chemical stability** : Stable under normal conditions.

**Possibility of hazardous reactions**

: No dangerous reaction known under conditions of normal use.

**Conditions to avoid** : Avoid excessive heat, sparks and open flame. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

**Incompatible materials** : Strong oxidizing agents; Strong acids Strong bases; calcium hypochlorite ;Perchloric acid. .

**Hazardous decomposition products**

: None known, refer to hazardous combustion products in Section 5.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure:

**Routes of entry inhalation** : YES

**Routes of entry skin & eye** : YES

**Routes of entry Ingestion** : YES

**Routes of exposure skin absorption**

: YES

#### Potential Health Effects:

**Signs and symptoms of short-term (acute) exposure**

##### *Sign and symptoms Inhalation*

: If mists are inhaled, may cause tearing, general anesthesia, headache, coughing, respiratory stimulation, nausea, vomiting, pulmonary, kidney and liver damage.

##### *Sign and symptoms ingestion*

: Ingestion can cause gastrointestinal irritation, nausea, and diarrhea.

##### *Sign and symptoms skin*

: Direct skin contact may cause temporary redness.

##### *Sign and symptoms eyes*

: Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

**Potential Chronic Health Effects**

: Prolonged or repeated ingestion may cause bladder or kidney stones.

**Mutagenicity**

: Not expected to be mutagenic.

**Carcinogenicity**

: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

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**Reproductive effects & Teratogenicity**

: Not expected to cause reproductive effects.

**Sensitization to material**

: Not expected to be a skin or respiratory sensitizer.

**Specific target organ effects**

: According to the classification criteria of U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015), this product is not expected to cause target organ toxicity through single or repeated exposures.

**Medical conditions aggravated by overexposure**

: Pre-existing skin, eye or nervous system disorders.

**Synergistic materials**

: Not available.

**Toxicological data**

: See below for toxicological data on the substance.

<u>Chemical name</u>	<u>LC<sub>50</sub>(4hr)</u>	<u>LD<sub>50</sub></u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Ethanol, 2-Butoxyethoxy	0.136 mg/L (No mortality)	6560 mg/kg	2764 mg/kg

**Other important toxicological hazards**

: CNS depression may result from extreme exposures.

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

: See the following tables for individual ingredient ecotoxicity data. Do not allow material to contaminate ground water system.

**Ecotoxicity data:**

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Ethanol, 2-Butoxyethoxy	112-34-5	1300 mg/L (Bluegill sunfish)	N/Av	None.

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Daphnia</u>		
		<u>EC50 / 48h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Ethanol, 2-Butoxyethoxy	112-34-5	> 100 mg/L (Daphnia magna)	N/Av	None.

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
Ethanol, 2-Butoxyethoxy	112-34-5	> 100 mg/L/96hr (Green algae)	>100 mg/L (Green algae)	None.

**Persistence and degradability**

: Readily biodegradable.

**Bioaccumulation potential**

: No data is available on the product itself.

<u>Components</u>	<u>Partition coefficient n-octanol/ater (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Ethanol, 2-Butoxyethoxy (CAS 112-34-5)	1	1.4

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**Mobility in soil** : No data is available on the product itself.

**Other Adverse Environmental effects**

: No data is available on the product itself.





### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal** : Handle waste according to recommendations in Section 7.

**Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations.

**RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

### SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None	Not regulated.	not regulated	none	
<b>49CFR/DOT Additional information</b>	None.				
TDG	None	Not regulated.	Not regulated	none	
<b>TDG Additional information</b>	None.				
ICAO/IATA	None.	Not regulated.	not regulated	none	
<b>ICAO/IATA Additional information</b>	None.				
IMDG	None.	Not regulated.	not regulated	none	
<b>IMDG Additional information</b>	None.				

**Special precautions for user** : Keep away from flames and hot surfaces. - No smoking.

**Environmental hazards** : See ECOLOGICAL INFORMATION, Section 12.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

: Not available.

### SECTION 15 - REGULATORY INFORMATION

#### US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

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Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus Concentration
Ethanol, 2-Butoxyethoxy	112-34-5	Yes	N/Ap	N/Av	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard ;Immediate (Acute) health hazard . Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

### US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Ethanol, 2-Butoxyethoxy	112-34-5	No	N/Ap	No	No	No	No	No	No

### Canadian Information:

WHMIS Classification: Refer to Section 2 for a WHMIS Classification for this product.  
All ingredients are present on the DSL.

### International Information:

Components listed below are present on the following International Inventory list:

Ingredients	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Ethanol, 2-Butoxyethoxy	112-34-5	203-961-6	Present	Present	(7)-97; (2)-422	KE-10466	Present	HSR001075

## SECTION 16. OTHER INFORMATION

### Legend

: ACGIH: American Conference of Governmental Industrial Hygienists  
CA: California  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
CFR: Code of Federal Regulations  
CNS: Central Nervous System  
COC: Cleveland Open Cup  
CSA: Canadian Standards Association  
DOT: Department of Transportation  
EPA: Environmental Protection Agency  
HMIS: Hazardous Materials Identification System  
HSDB: Hazardous Substances Data Bank  
IARC: International Agency for Research on Cancer  
Inh: Inhalation  
LC: Lethal Concentration  
LD: Lethal Dose  
MA: Massachusetts  
MN: Minnesota



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N/Ap: Not Applicable  
N/Av: Not Available  
NFFPA: National Fire Protection Association  
NIOSH: National Institute of Occupational Safety and Health  
NJ: New Jersey  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PA: Pennsylvania  
PEL: Permissible exposure limit  
RCRA: Resource Conservation and Recovery Act  
RI: Rhode Island  
RTECS: Registry of Toxic Effects of Chemical Substances  
SARA: Superfund Amendments and Reauthorization Act  
STEL: Short Term Exposure Limit  
TLV: Threshold Limit Values  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

### References

: OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.  
Canadian Centre for Occupational Health and Safety, CCHInfoWeb Databases, 2015 (Chempendium, RTECs, HSDB, INCHEM). 2015  
European Chemicals Agency, Classification Legislation, 2015  
Material Safety Data Sheet from manufacturer.

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### Other special considerations for handling

: Provide adequate information, instruction and training for operators.

<p><b>Prepared for:</b> Comet Chemical Company Ltd. 3463 Thomas Street Innisfill, ON L9S 3W4 Information (M-F 8:00-5:00): 705-436-5580 www.cometchemical.com</p>	
<p><b>Prepared by:</b> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.); (888) 977-4834 (Canada) <a href="http://www.thecompliancecenter.com">http://www.thecompliancecenter.com</a></p>	

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