

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 1 of 11

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Butyl Cellosolve**

Product Code(s) : Not available.

Recommended use of the chemical and restrictions on use

: Chemical intermediate.; Solvent
Use pattern: professional use
Restriction on use: None known

Chemical family : Pure substance

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. Sweet 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

Acute Toxicity, inhalation - Category 3 (mist)

Acute toxicity, dermal - Category 3

Acute toxicity, oral - Category 4

Skin Irritation - Category 2

Serious eye damage/eye irritation - Category 2A

Label elements

Hazard pictogram(s)



Signal Word

DANGER!

Hazard statement(s)

Combustible liquid.

Toxic if inhaled.

Toxic in contact with skin.

Harmful if swallowed.

Causes serious eye irritation.

Causes skin irritation.



Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 2 of 11

SAFETY DATA SHEET

Precautionary statement(s)

Keep away from flames and hot surfaces. - No smoking.
Avoid breathing mist or vapours.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/clothing and eye/face protection.

If on skin: Wash with plenty of soap and water.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs, get medical advice/attention.
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.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
In case of fire: Use water fog, dry chemical, CO₂ or 'alcohol' foam to extinguish.

Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

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

Other hazards

Other hazards which do not result in classification:

Burning produces obnoxious and toxic fumes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be an aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
2-butoxyethanol	EGBE; Glycol Ether EB	111-76-2	100.00

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms persist.
- Inhalation* : If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTRE or doctor/physician if you feel unwell.
- Skin contact* : If on skin: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use.
- Eye contact* : For eye contact, flush with running water for at least 15 minutes. If eye irritation persists: get medical advice/attention.

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 3 of 11

SAFETY DATA SHEET

Most important symptoms and effects, both acute and delayed

- : Toxic in contact with skin. Toxic if inhaled. Causes skin irritation. Harmful if swallowed. Contact may cause redness, swelling and a painful sensation. Causes serious eye irritation. Symptoms may include tearing, redness and discomfort. May cause respiratory irritation. May cause coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard - material may cause lung inflammation or damage if it enters lungs through vomiting or swallowing. Inhaling high concentrations may cause central nervous system depression, with effects ranging from dizziness and headache to unconsciousness. Chronic overexposure to 2-butoxyethanol may cause liver, kidney and blood damage, based on animal data.

Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Carbon dioxide (CO₂); Dry chemical; Alcohol resistant foam; Water fog.

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

- : Combustible liquid and vapor. Vapour can travel considerable distance and flashback to a source of ignition. Vapours are heavier than air and collect in confined and low-lying areas. Vapour will form a flammable/explosive mixture with air between the upper and lower flammable limits. May form explosive peroxides.

Flammability classification (OSHA 29 CFR 1910.106)

- : Flammable liquid- Category 4

Hazardous combustion products

- : Carbon dioxide and carbon monoxide.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow material to contaminate ground water system. 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. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools and equipment in the clean-up process. Absorb material with inert absorbent, and place into labelled containers for disposal. Contact the proper local authorities. Refer to Section 13 for disposal of contaminated material.



Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 4 of 11

SAFETY DATA SHEET

Special spill response procedures

- : Contact appropriate local and provincial environmental authorities for assistance and/or reporting requirements. US CERCLA Reportable quantity (RQ): None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Keep away from heat, open flames and hot surfaces. - No smoking. Use only non-sparking tools. Use explosion-proof electrical and ventilating equipment. Wear protective gloves/clothing and eye/face protection. Use only in well-ventilated areas. Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

- Conditions for safe storage** : Store in cool/well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking. Keep container tightly closed. May form explosive peroxides.

- Incompatible materials** : Strong oxidizers (e.g. Chlorine, Peroxides, etc.).

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
2-butoxyethanol	20 ppm	N/Av	50 ppm (skin)	N/Av

Exposure controls

Ventilation and engineering measures

- : Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

- Respiratory protection** : If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. 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. Advice should be sought from respiratory protection specialists.

- Skin protection** : Wear protective gloves/clothing. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

- Eye / face protection** : Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles

- Other protective equipment** : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations

- : Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Clear colourless liquid.

- Odour** : Sweet odour.

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 5 of 11

SAFETY DATA SHEET

Odour threshold : 0.48 ppm
 pH : Not available.
 Melting/Freezing point : -75°C (-103°F)
 Initial boiling point and boiling range : 171°C (339.8°F)
 Flash point : 67°C (152.6°F)
 Flashpoint (Method) : closed cup
 Evaporation rate (BuAe = 1) : 0.1
 Flammability (solid, gas) : Not applicable.
 Lower flammable limit (% by vol.) : Not available.
 Upper flammable limit (% by vol.) : Not available.
 Oxidizing properties : None known.
 Explosive properties : May form explosive peroxides.
 Vapour pressure : 1.17 hPa
 Vapour density : (Air = 1) 4
 Relative density / Specific gravity : 0.90
 Solubility in water : Soluble. (900 g/l)
 Other solubility(ies) : Soluble in most organic solvents.
 Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : 0.81
 Auto-ignition temperature : Not available.
 Decomposition temperature : 124.7°C (DSC)
 Viscosity : 3.642 mm/2s@ 20°C
 Volatiles (% by weight) : Not available.
 Volatile organic Compounds (VOC's) : No information available.
 Absolute pressure of container : Not applicable.
 Flame projection length : Not applicable.
 Other physical/chemical comments : Ignition temperature: 230°C (446°F)
 Molecular Weight: 118.2 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive. May form explosive peroxides.
 Chemical stability : Stable under normal conditions.
 Possibility of hazardous reactions : Hazardous polymerization does not occur.
 Conditions to avoid : Avoid heat, open flames, sparks, static electricity and electrical equipment. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. Avoid prolonged exposure to air. Prolonged storage. Do not allow evaporation to dryness.
 Incompatible materials : Strong oxidizers (e.g. Chlorine, Peroxides, etc.).
 Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 6 of 11

SAFETY DATA SHEET

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

- : Harmful if inhaled. May cause respiratory irritation. Symptoms may include coughing and sneezing. Inhalation may cause headache, nausea and central nervous effects such as dizziness, coordination difficulties and unconsciousness. Could result in pulmonary edema (fluid accumulation).

Sign and symptoms ingestion

- : Harmful if swallowed. Ingestion can cause gastrointestinal irritation, nausea, and diarrhea. May be an aspiration hazard.

Sign and symptoms skin

- : 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).
Skin irritation. Category 2 Causes skin irritation.
Toxic in contact with skin. May be absorbed and cause symptoms similar to those for inhalation.

Sign and symptoms eyes

- : 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).
Eye damage/irritation Category 2A Causes serious eye irritation.

Potential Chronic Health Effects

- : Repeated exposure may cause skin dryness or cracking. Chronic overexposure to 2-butoxyethanol may cause liver, kidney and blood damage, based on animal data.

Mutagenicity

- : Not expected to be mutagenic in humans.

Carcinogenicity

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

Reproductive effects & Teratogenicity

- : This product is not expected to cause reproductive or developmental 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, respiratory and central nervous system disorders.

Synergistic materials

- : No information available.

Toxicological data

- : See below for toxicological data on the substance.
Acute Toxicity, inhalation - Category 3 (vapor)
Acute toxicity, dermal - Category 3
Acute toxicity, oral - Category 4

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 7 of 11

SAFETY DATA SHEET

<u>Chemical name</u>	<u>LC₅₀(4hr)</u>	<u>LD₅₀</u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
2-butoxyethanol	450 ppm (2.175 mg/L)	530 mg/kg	400 - 500 mg/kg

Other important toxicological hazards

: None reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Not expected to be harmful to aquatic organisms. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Do not allow material to contaminate ground water system. See the following tables for the substance's ecotoxicity data.

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>
2-butoxyethanol	111-76-2	1490 mg/L (Lepomis macrochirus)	>100 mg/L (Zebra fish)	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>
2-butoxyethanol	111-76-2	835 mg/L (Daphnia magna)	100 (Daphnia magna)	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>
2-butoxyethanol	111-76-2	911 mg/L (Green algae)	286 mg/L (Green algae)	none

Persistence and degradability

: Readily biodegradable.

Bioaccumulation potential

: Not expected to bioaccumulate.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
2-butoxyethanol (CAS 111-76-2)	0.81 at 25 °C	0.97

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

Other Adverse Environmental effects

: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.



Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 8 of 11

SAFETY DATA SHEET

- 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	
49CFR/DOT Additional information	Not regulated for road or rail shipment if packaged in non-bulk containers (450 Litres or less each). When shipped in bulk use Combustible Liquids, n.o.s. NA1993, PG III				
TDG	None.	Not regulated.	not regulated	none	
TDG Additional information	None.				
IMDG	None.	Not regulated.	not regulated	none	
IMDG Additional information	None.				
ICAO/IATA	None.	Not regulated.	not regulated	none	
ICAO/IATA Additional information	None.				

Special precautions for user : Appropriate advice on safety must accompany the package. Keep away from heat and open flames. - No smoking.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.

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

: This information is not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

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



Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 9 of 11

SAFETY DATA SHEET

<u>Ingredients</u>	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
2-butoxyethanol	111-76-2	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:

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
2-butoxyethanol	111-76-2	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

Canadian Environmental Protection Act (CEPA): . All ingredients are present on the DSL.

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

International Information:

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

<u>Ingredients</u>	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
2-butoxyethanol	111-76-2	203-905-0	Present	Present	(7)-97; (2)-407	KE-04134	Present	HSR001154

SECTION 16. OTHER INFORMATION

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists
AICS: Australian Inventory of Chemical Substances
ATE: Acute Toxicity Estimate
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
ECHA: European Chemicals Agency
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial chemical Substances
ENCS: Existing and New Chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 10 of 11

SAFETY DATA SHEET

IBC: Intermediate Bulk Container
IECSC: Inventory of Existing Chemical Substances
IMDG: International Maritime Dangerous Goods
IOC: Inventory of Chemicals
IUCLID: International Uniform Chemical Information Database
KECI: Korean Existing Chemicals Inventory
KECL: Korean Existing Chemicals List
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/Ap: Not Applicable
N/Av: Not Available
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PICCS: Philippine Inventory of Chemicals and Chemical Substances
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet / Material Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

- References** :
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016
 2. International Agency for Research on Cancer Monographs, searched 2016
 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2016(Chempendium, HSDB and RTECs).
 4. Material Safety Data Sheets from manufacturer.
 5. US EPA Title III List of Lists - 2016 version.
 6. California Proposition 65 List - 2016 version.
 7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2016.

Preparation Date (mm/dd/yyyy)

: 03/17/2016

Other special considerations for handling

: Provide adequate information, instruction and training for operators.



Comet Chemical Company Ltd.
3463 Thomas Street
Innisfill, ON, Canada, L9S 3W4
Telephone: (705) 436 5580

Butyl Cellosolve

SDS Preparation Date (mm/dd/yyyy): 03/17/2016

Page 11 of 11

SAFETY DATA SHEET

<u>Prepared for:</u> Comet Chemical Company Ltd. 3463 Thomas Street Innisfill, ON L9S 3W4 Information (M-F 8:00-5:00): 705-436-5580 www.cometchemical.com	The logo for Comet Chemical Company Ltd. features a red circle with a white horizontal line through the center. To the right of the circle, the word "COMET" is written in large, bold, black capital letters, and "COMET CHEMICAL COMPANY LTD." is written in smaller, bold, black capital letters below it.
<u>Prepared by:</u> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com	The logo for ICC The Compliance Center Inc. features a blue circle with the letters "icc" in white. To the right of the circle, the words "ComplianceCenter" are written in a blue, sans-serif font.

DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Comet Chemical Company Ltd..and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Comet Chemical Company Ltd.. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this Safety Data Sheet does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Comet Chemical Company Ltd.

END OF DOCUMENT