

SAFETY DATA SHEET

Preparation Date: 5/9/2014

Revision Date: 4/26/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: E1016
Product Name: ETHER, PURIFIED

Other means of identification

Synonyms: Diethyl ether
Diethyl oxide
Ethyl oxide
Éther éthylique (French)
Ethoxyethane
Ethyl ether
Oxyde d'ethyle (French)

CAS #: 60-29-7
RTECS # KI5775000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Solvent.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation. May cause drowsiness or dizziness
Extremely flammable liquid and vapor

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Toxic to aquatic life with long lasting effects
Toxic to aquatic life

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/.../equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

In case of fire: Use CO₂, dry chemical, or foam to extinguish.
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 skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
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 or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Ethyl Ether	60-29-7	100

Butylated Hydroxytoluene	128-37-0	0.0001
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4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Irritating to eyes, respiratory system and skin Central nervous system effects Dizziness Drowsiness Fatigue May cause headache Ingestion may cause vomiting and nausea May cause cardiovascular effects
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Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.
Unsuitable Extinguishing Media:	Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products:	Carbon Monoxide, Carbon Dioxide.
Specific hazards:	Extremely flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in

low or confined areas (sewers, basements, tanks). Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not let this chemical enter the environment. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up

Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Sensitive to light. Store in light-resistant containers. Air sensitive. Hygroscopic. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep at temperatures below 24 °C. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents
 Acids
 Halogens
 Sulfur
 Sulfur compounds

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**National occupational exposure limits****United States**

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Ethyl Ether	60-29-7	400 ppm TWA 1200 mg/m ³ TWA	None	500 ppm STEL 400 ppm TWA	None
Butylated Hydroxytoluene	128-37-0	None	10 mg/m ³ TWA	2 mg/m ³ TWA inhalable fraction and vapor	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Ethyl Ether	60-29-7	400 ppm TWA 1210 mg/m ³ TWA 500 ppm STEL 1520 mg/m ³ STEL	400 ppm TWA 500 ppm STEL	500 ppm STEL	None
Butylated Hydroxytoluene	128-37-0	10 mg/m ³ TWA	2 mg/m ³ TWA aerosol, inhalable, and vapour	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Ethyl Ether	60-29-7	500 ppm STEL 1520 mg/m ³ STEL 400 ppm TWA 1210 mg/m ³ TWA	400 ppm TWA 1200 mg/m ³ TWA 500 ppm STEL 1500 mg/m ³ STEL
Butylated Hydroxytoluene	128-37-0	10 mg/m ³ TWA	10 mg/m ³ TWA 20 mg/m ³ STEL

Appropriate engineering controls**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment**Personal Protective Equipment**

Eye protection: Goggles

Skin and body protection: Chemical resistant apron
 Long sleeved clothing
 Gloves

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: No information available.	Color: Colorless.
Odor: Ethereal. Sweetish. Pungent.	Taste Burning. Sweet.	Formula: C4-H10-O
Molecular/Formula weight: 74.12	Flammability: No information available	Flash point (°C): -45
Flashpoint (°C/°F): -45 °C/ -49 °F -40 °C/-40 °F	Flash Point Tested according to: Closed cup Open cup	Autoignition Temperature (°C/°F): 160-180 °C/320-356 °F
Lower Explosion Limit (%): 1.9%	Upper Explosion Limit (%): 36-48%	Melting point/range(°C/°F): -116 °C; -177 °F
Decomposition temperature(°C/°F): No information available	Boiling point/range(°C/°F): 34.6 °C/94.3 °F at 760 mm Hg 17.9 °C/64.2 °F at 400 mm Hg 2.2 °C/36 °F at 200 mm Hg	Bulk density: No information available
Density (g/cm3): No information available	Specific gravity: 0.7134-0.7147 @ 20 °C	pH: No information available
Vapor pressure @ 20°C (kPa): 58.9	Evaporation rate: No information available	Vapor density: 2.55
VOC content (g/L): 713-714	Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available
Viscosity: No information available	Miscibility: Miscible with many organic solvents Miscible with Benzene Miscible with Chloroform Miscible with oils Miscible with Petroleum Ether Miscible with lower aliphatic alcohols	Solubility: Soluble in Acetone Very soluble in Ethanol Soluble in Benzene Slightly soluble in water

10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents
Reactive with acids

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Exposure to light. Exposure to moisture. Exposure to moist air. Exposure to air. Incompatible materials.

Incompatible Materials: Oxidizing agents
Acids
Halogens
Sulfur
Sulfur compounds

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Skin. Inhalation. Eyes.

Acute Toxicity

Component Information

Ethyl Ether
CAS-No. 60-29-7

LD50/oral/rat = 1215 mg/kg Oral LD50 Rat
LD50/oral/mouse = 1760 mg/kg
LD50/dermal/rabbit = >20 mL/kg Dermal LD50 Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = 32000 ppm 4 hr
LC50/inhalation/mouse = 130000 mg/m³ 3 hr
31000 ppm 30 M
Other LD50 or LC50 information = No information available

Butylated Hydroxytoluene
CAS-No. 128-37-0

LD50/oral/rat = 890 mg/kg Oral LD50 Rat
LD50/oral/mouse = 650-1040 mg/kg
LD50/dermal/rabbit = No information available
LD50/dermal/rat = > 2000 mg/kg Dermal LD50 Rat
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 10700mg/kg oral LD50 Guinea pig
2100 mg/kg oral LD50 Rabbit

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 1215 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 1760 mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = > 20 ml/kg

Product code: E1016

Product name: ETHER, PURIFIED

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LD50/dermal/rat**VALUE -Acute Tox Dermal =** No information available**LC50/inhalation/rat****VALUE-Vapor =** No information available**VALUE-Gas =** 32000 ppm (4-hr)**VALUE-Dust/Mist =** No information available**LC50/Inhalation/mouse****VALUE-Vapor =** 130000 mg/m³ 4 hr**VALUE - Gas =** 31000 ppm 30 M**VALUE - Dust/Mist =** No information available**Symptoms****Skin Contact:**

Causes skin irritation. Moderate skin irritation. It may be absorbed through the skin. If absorbed through skin it may cause systemic effects.

Eye Contact:

Causes eye irritation. May cause conjunctivitis.

Inhalation

Irritating to respiratory system. May cause conjunctival irritation. May affect respiration (respiratory depression). Symptoms may include coughing and bronchodilation. May cause salivation. May cause loss of appetite. May affect cardiovascular system (bradycardia, tachycardia, cardiac arrhythmias). Inhalation of high concentrations of vapors may cause dizziness or suffocation. Inhalation of high concentrations of vapor may cause anesthetic effects. May cause central nervous system effects, central nervous system depression. It may affect behavior/central nervous system (convulsions, excitement). It may affect behavior/central nervous system (ataxia, general anesthetic, drowsiness). It may affect behavior/central nervous system (headache, euphoria, fatigue, slurred speech).

Ingestion

Harmful if swallowed. May cause digestive (gastrointestinal) tract irritation. It may cause abdominal (stomach) distention. Ingestion may cause nausea, vomiting. May cause central nervous system effects (affect behavior). Aspiration hazard if swallowed. Aspiration into the lungs can cause chemical pneumonitis. May cause loss of appetite.

Aspiration hazard

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Chronic Toxicity**

Prolonged or repeated inhalation and/or ingestion may cause central nervous system effects (affect behavior). Prolonged or repeated ingestion may cause weight loss. Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated ingestion may affect the liver. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated skin contact may cause dermatitis and defatting, dryness, and cracking of the skin. Prolonged or repeated inhalation may affect the kidneys.

Sensitization:

No information available.

Mutagenic Effects:For Ethyl Ether:
May affect genetic material
Animal experiments showed mutagenic effects
Experiments with bacteria have shown mutagenic effects**Carcinogenic effects:**

Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Ethyl Ether	60-29-7	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Butylated Hydroxytoluene	128-37-0	Group 3 - Not Classifiable - Supplement 7 [1987] Monograph 40 [1986]	A4 Not Classifiable as a Human Carcinogen	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory system. central nervous system.
STOT - repeated exposure No information available.
Target Organs: Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Ethyl Ether - 60-29-7

Freshwater Fish Species Data: 2560 mg/L LC50 Pimephales promelas 96 h flow-through 1 10000 mg/L LC50 Lepomis macrochirus 96 h static 1

Water Flea Data: 165 mg/L EC50 Daphnia magna 24 h

Butylated Hydroxytoluene - 128-37-0

Freshwater Algae Data: 6 mg/L EC50 Pseudokirchneriella subcapitata 72 h 0.42 mg/L EC50 Desmodesmus subspicatus 72 h

Freshwater Fish Species Data: 5 mg/L LC50 Oryzias latipes 48 h 1

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethyl Ether	60-29-7	None	None	None	U117 ignitable waste
Butylated Hydroxytoluene	128-37-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1155
Proper Shipping Name: Diethyl ether
Hazard Class: 3
Subsidiary Class: No information available
Packing group: I
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): 100 lbs/45.4 kg
Special Provisions: No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: UN1155
Proper Shipping Name: Diethyl ether
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: I
Marine Pollutant: No Information available
Description: No information available

ADR

UN-No: UN1155
Proper Shipping Name: Diethyl ether (Ethyl ether)
Hazard Class: 3
Packing Group: I
Subsidiary Risk: No information available

IMO / IMDG

UN-No: UN1155
Proper Shipping Name: Diethyl ether (Ethyl ether)
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: I
Marine Pollutant: No information available
EMS: F-E

RID

UN-No: UN1155
Proper Shipping Name: Diethyl ether (Ethyl ether)
Hazard Class: 3
Subsidiary Risk: 3
Packing Group: I

ICAO

UN-No: UN1155
Proper Shipping Name: Diethyl ether

Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: I

IATA

UN-No: UN1155
Proper Shipping Name: Diethyl ether
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: I
ERG Code: 3AH
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Ethyl Ether</i>	60-29-7	PresentACTIV E	Present KE-27690	Present	Present (2)-365,(2)-36 1	Present	Present	Present 200-467-2
<i>Butylated Hydroxytoluene</i>	128-37-0	PresentACTIV E	Present KE-03079	Present	Present (9)-1805,(5)-6 372,(3)-540	Present	Present	Present 204-881-4

U.S. Regulations

Ethyl Ether

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0701
New Jersey (EHS) List: 0701 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
New Jersey TCPA - EHS: 10000lbTQ
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
 100 lb RQ
Louisiana Reportable Quantity List for Pollutants: 100lbfinal RQ
 45.4kgfinal RQ
California Directors List of Hazardous Substances: Present

Butylated Hydroxytoluene

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0814
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present
California Directors List of Hazardous Substances: Present
FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.3173
FDA - Direct Food Additives 21 CFR 172.115, 21 CFR 172.615, 21 CFR 173.340
FDA - 21 CFR - Total Food Additives 137.350, 166.110, 172.110, 172.115, 172.185, 172.615, 173.340, 175.105, 175.125, 175.300, 175.380, 175.390, 176.170, 176.210, 177.1010, 177.1210, 177.1350, 177.2260, 177.2600, 178.2010, 178.3570, 179.45, 181.24, 182.3173

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive

				Toxicity	Toxicity:
Ethyl Ether	60-29-7	Not Listed	Not Listed	Not Listed	Not Listed
Butylated Hydroxytoluene	128-37-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Ethyl Ether	60-29-7	100 lb final RQ 45.4 kg final RQ	None	None	None	None
Butylated Hydroxytoluene	128-37-0	None	None	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethyl Ether	60-29-7	Not Applicable	01/26/199406/30/1998
Butylated Hydroxytoluene	128-37-0	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Ethyl Ether
60-29-7 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Specific target organ toxicity - Single exposure - Category 3: H336 May cause drowsiness or dizziness.
Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to 'Combustible dust' hazard class)

Butylated Hydroxytoluene
128-37-0 (0.0001)

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

B2 Flammable liquid

Components

Ethyl Ether

WHMIS 1988

B2

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Ethyl Ether	1 %
Butylated Hydroxytoluene	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Ethyl Ether	60-29-7	Present	Not Listed
Butylated Hydroxytoluene	128-37-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Ethyl Ether	60-29-7	Not listed
Butylated Hydroxytoluene	128-37-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl Ether	60-29-7	Not listed
Butylated Hydroxytoluene	128-37-0	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Ethyl Ether	60-29-7	Flammable liquids - Flam. Liq. 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification); Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.; Supplemental Hazards: EUH019 May form explosive peroxides.; Supplemental Hazards: EUH066 Repeated exposure may cause skin dryness or cracking.603-022-00-4
Butylated Hydroxytoluene	128-37-0	No information

EU - CLP (1272/2008)

R-phrase(s)

- R12 - Extremely flammable.
- R19 - May form explosive peroxides.
- R22 - Harmful if swallowed.
- R66 - Repeated exposure may cause skin dryness or cracking.
- R67 - Vapors may cause drowsiness and dizziness.

S -phrase(s)

- S 9 - Keep container in a well-ventilated place.
- S16 - Keep away from sources of ignition - No smoking.
- S29 - Do not empty into drains.
- S33 - Take precautionary measures against static discharges.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Ethyl Ether	60-29-7	F+; R12 R19 Xn; R22 R66 R67	No information	(S2) S9 S16 S29 S33
Butylated Hydroxytoluene	128-37-0		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

- F+ - Extremely flammable.
- Xn - Harmful.

Xn



F+



16. OTHER INFORMATION

Preparation Date: 5/9/2014
Revision Date: 4/26/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet