

SAFETY DATA SHEET

Preparation Date: 3/7/2018

Revision Date: 3/7/2018

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: B1181
Product Name: 2-BUTOXYETHYL ACETATE

Other means of identification

Synonyms: Acetic acid, 2-butoxyethyl ester
 2-Butoxyethanol acetate
 2-Butoxyethyl acetate
 Butyl cellosolve acetate
 Butylglycol acetate
 Glycol monobutyl ether acetate
 Ethylene glycol monobutyl ether acetate
 EGBEA
 Ethylene glycol butyle ether acetate
 n-Butoxyethanol acetate

CAS #: 112-07-2
RTECS # KJ8925000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Solvent. Solvent for paints, lacquers and printing inks. solvent for nitrocellulose and other cellulose derivatives. Research and Development. Manufacture of substances. Laboratory reagent.

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
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4

Flammable liquids

Category 4

Label elements

Warning

Hazard statements

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
Combustible liquid



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Harmful to aquatic life with long lasting effects
Harmful 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

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish.
IF ON SKIN: Wash with plenty of water
Call a POISON CENTER or doctor/physician if you feel unwell
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 cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
2-Butoxyethyl Acetate	112-07-2	100

4. FIRST AID MEASURES

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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. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If symptoms persist, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. 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** Glycol ethers may cause irritation to the skin, lungs, and eyes., congestion and edema in the lungs. May cause abdominal pain, nausea, vomiting, and sometimes diarrhea. May affect the kidneys (polyuria, oliguria, anuria, acute renal failure). May affect the liver. Can cause central nervous system effects such as headache, drowsiness, weakness, slurred speech, recrudescant stuttering, staggering gait, changes in personality, tremors.
Blurred vision
Hematuria (bloody urine)
May affect the blood

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: Dry chemical. Carbon dioxide (CO₂). 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: Combustible material. May be ignited by heat, sparks or flames. 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). Containers may explode when heated. 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 large fires, flood fire area with water from a distance. Cool affected containers with flooding quantities of water.

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. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. All equipment used when handling the product must be grounded. Pay attention to flashback. Take precautionary measures against static discharges. 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. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water.

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 clean non-sparking tools to collect absorbed material. 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. Keep away from incompatible materials. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Safe Handling Advice

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

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed. Keep in a well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
2-Butoxyethyl Acetate	112-07-2	None	5 ppm TWA 33 mg/m ³ TWA	20 ppm TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
2-Butoxyethyl Acetate	112-07-2	20 ppm TWA 131 mg/m ³ TWA	20 ppm TWA	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
2-Butoxyethyl Acetate	112-07-2	50 ppm STEL 333 mg/m ³ STEL 20 ppm TWA 133 mg/m ³ TWA	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Chemical resistant apron
Gloves
Long sleeved clothing
- 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:
Clear.

Color:
Colorless.

Odor:
Sweet. Fruity. Pleasant.

Taste
No information available.

Formula:
CH₃COO(CH₂)₂OC₄H₉

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ACETATE

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Molecular/Formula weight: 160.21 g/mol	Flammability: Combustible	Flashpoint (°C/°F): 71°C/160°F 88°C/190°F
Flash Point Tested according to: Closed cup Open cup	Autoignition Temperature (°C/°F): 340°C/644°F	Lower Explosion Limit (%): 0.88% (93°C/200°F)
Upper Explosion Limit (%): 8.54% (135°C/275°F)	Melting point/range(°C/°F): -64°C/-83°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 192°C/378°F	Bulk density: No information available	Density (g/cm3): 0.9422
Specific gravity: No information available	pH: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: 5.5	VOC content (g/L): No information available
Odor threshold (ppm): 0.1	Partition coefficient (n-octanol/water): 1.57	Viscosity: No information available
Miscibility: No information available	Solubility: Soluble in hydrocarbons Soluble in organic solvents Soluble in Water	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat, flames and sparks. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents

Hazardous decomposition products: Carbon oxides.

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. Inhalation. Skin.

Acute Toxicity

Component Information

2-Butoxyethyl Acetate	
CAS-No.	112-07-2

LD50/oral/rat = 2400 mg/kg Oral LD50 Rat (RTECS; LOLI; European Chemicals Bureau IUCLID dataset)
1600 mg/kg (European Chemicals Bureau IUCLID dataset)

LD50/oral/mouse = 3200 mg/kg oral LD50 mouse

LD50/dermal/rabbit = 1480 mg/kg Dermal LD50 Rabbit
1500 mg/kg dermal LD50 rabbit

LD50/dermal/rat = No information available

LC50/inhalation/rat = > 400 ppm Inhalation LC50 4 H

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = 4700 mg/kg LD50 dermal guinea pig

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 1600 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 3200 mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = 1480 mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = >400 ppm (4-hr)

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:

Harmful if absorbed through skin. May cause skin irritation. If absorbed through the skin, it may affect the kidneys (hematuria), blood (normocytic anemia) and cause other systemic effects similar to ingestion.

Eye Contact:

May cause eye irritation.

Inhalation

May cause irritation of respiratory tract. Exposure to high concentrations may cause headache, nausea, vomiting. May cause central nervous system effects, central nervous system depression.

Ingestion

Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May affect behavior/central nervous system (headache, drowsiness, recrudescence, stuttering, staggering gait, tremor, personality/mood changes, blurred vision, slurred speech). May affect the kidneys (albuminuria, hematuria). May affect liver.

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged skin contact may defat the skin and produce dermatitis. Chronic exposure may affect the kidneys and cause kidney damage. Long term or repeated exposure may affect the blood (anemia).

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
2-Butoxyethyl Acetate	112-07-2	Not listed	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	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: May cause adverse reproductive effects based on animal data

Developmental Effects: No information available

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: Liver. Kidneys. Brain.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

2-Butoxyethyl Acetate - 112-07-2

Freshwater Algae Data: 500 mg/L EC50 *Desmodesmus subspicatus* 72 h

Freshwater Fish Species Data: 80 mg/L LC50 *Leuciscus idus* 48h

28.3 mg/L LC50 *Oncorhynchus mykiss* 96h

Water Flea Data: 37 mg/L EC50 *Daphnia magna* 48 h

Persistence and degradability: Readily biodegradable (90%)

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 Do not re-use empty containers
Dispose of as unused product.

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
2-Butoxyethyl Acetate	112-07-2	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class No information available
Packing group: No information available
Emergency Response Guide Number No information available
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No Information available
Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
ERG Code: No information available
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.
2-Butoxyethyl Acetate	112-07-2	PresentACTIV E	Present KE-04135	Present	Present (2)-740	Present	Present	Present 203-933-3

U.S. Regulations*2-Butoxyethyl Acetate*

New Jersey RTK Hazardous Substance List: 4055 3138
New Jersey (EHS) List: 3138 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental Hazard
Pennsylvania RTK - Environmental Hazard List Present
Louisiana Reportable Quantity List for Pollutants: 5000 lb RQ

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 Toxicity	Female Reproductive Toxicity:
2-Butoxyethyl Acetate	112-07-2	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and	Section 302 Extremely Hazardous	Section 302 Extremely Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis

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		their Reportable Quantities	Substances and TPQs	Substances and RQs		
2-Butoxyethyl Acetate	112-07-2	None	None	None	None	1.0% de minimis concentration

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
2-Butoxyethyl Acetate	112-07-2	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
2-Butoxyethyl Acetate
112-07-2 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 4: H227 Combustible liquid.; Acute toxicity - Dermal - Category 4: H312 Harmful in contact with skin.

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

B3 Combustible liquid

Components

2-Butoxyethyl Acetate

WHMIS 1988

B3

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.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
2-Butoxyethyl Acetate	112-07-2	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
2-Butoxyethyl Acetate	112-07-2	Present
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
2-Butoxyethyl Acetate	112-07-2	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
2-Butoxyethyl Acetate	112-07-2	Acute toxicity - Dermal - Acute Tox. 4: H312 Harmful in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification)607-038-00-2

EU - CLP (1272/2008)

R-phrases(s)

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R20/21 - Harmful by inhalation and in contact with skin.

S -phrase(s)

S 2 - Keep out of the reach of children.

S24 - Avoid contact with skin.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
2-Butoxyethyl Acetate	112-07-2	Xn; R20/21	No information	S: (2)-24

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

Indication of danger:

Xn - Harmful.

Xn



16. OTHER INFORMATION

Preparation Date: 3/7/2018
Revision Date: 3/7/2018
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