

## SAFETY DATA SHEET

Preparation Date: 05/21/2019

Revision date 05/21/2019

Revision Number: G1

### 1. IDENTIFICATION

#### Product identifier

**Product code:** B2321  
**Product Name:** ISO-BUTYL ACETATE

#### Other means of identification

**Synonyms:** 2-Methyl-1-propyl acetate  
 2-Methylpropyl acetate  
 Acetate d'isobutyle (French)  
 Acetic acid, 2-methylpropyl ester  
 Isobutylester kyseliny octove (Czech)  
 beta-Methylpropyl ethanoateethanoate

**CAS #:** 110-19-0  
**RTECS #** AI4025000  
**Cl#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** No information available.  
**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:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

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

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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

#### Label elements

**Danger**

**Hazard statements**  
 Causes skin irritation

Causes eye irritation  
May cause drowsiness or dizziness  
Highly flammable liquid and vapor



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing mist or vapors  
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 container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**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 attention.  
If skin irritation occurs: Get medical attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water  
Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
iso-Butyl Acetate	110-19-0	100

**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 irritation develops. Consult a physician if necessary.

**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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

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

**Symptoms** Causes skin irritation  
Causes eye irritation  
May cause drowsiness or dizziness  
Headache  
tiredness  
Nausea  
Vomiting

**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 (CO<sub>2</sub>). Dry chemical. Water spray. Alcohol-resistant 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 (CO<sub>2</sub>).

**Specific hazards** Flammable. 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). Container explosion may occur under fire conditions or 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 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. Prevent entry into waterways, sewers, basements or confined areas.

### 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). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container.

## 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 ingest. Do not breathe vapors or spray mist. 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:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition.

#### **Incompatible Materials:**

Oxidizing agents  
Metals  
Acids

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

**United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
iso-Butyl Acetate	110-19-0	150 ppm TWA 700 mg/m <sup>3</sup> TWA	150 ppm TWA 700 mg/m <sup>3</sup> TWA	150 ppm STEL 50 ppm TWA	None

### Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
iso-Butyl Acetate	110-19-0	150 ppm TWA 713 mg/m <sup>3</sup> TWA	150 ppm TWA	None	None

### Australia and Mexico

Component	CAS No	Australia	Mexico
iso-Butyl Acetate	110-19-0	150 ppm TWA 713 mg/m <sup>3</sup> TWA	150 ppm TWA

### 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  
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. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Appearance:</b> No information available.	<b>Color:</b> Colorless.
<b>Odor:</b> No information available.	<b>Taste</b> No information available.	<b>Formula</b> C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>
<b>Molecular/Formula weight (g/mole):</b> 116.16	<b>Flammability (solid, gas)</b> no data available	<b>Flashpoint (°C/°F):</b> 17.8-21°C/ 64-70°F 85°C/ 185°F
<b>Flash Point Tested according to:</b> Closed cup Open cup	<b>Autoignition Temperature (°C/°F):</b> 421°C/ 789.8°F	<b>Lower Explosion Limit (%):</b> 1.3
<b>Upper Explosion Limit (%):</b> 10.5	<b>Melting point/range(°C/°F):</b> -98.6°C/ -145.5°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> 116-118°C/ 240.8-243.5°F	<b>Bulk density:</b> No information available	<b>Density (g/cm<sup>3</sup>):</b> 0.87

**Specific gravity:**  
No information available

**pH**  
No information available

**Vapor pressure @ 20°C (kPa):**  
1.73

**Evaporation rate:**  
No information available

**Vapor density:**  
4.0

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
0.64

**Partition coefficient  
(n-octanol/water):**  
1.60

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Very slightly soluble in water  
Very soluble in Ether  
Very soluble in Ethanol  
Very soluble in Propylene Glycol  
Soluble in Acetone

## 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. Ignition sources. Incompatible materials.

**Incompatible Materials:** Oxidizing agents  
Metals  
Acids

**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:**  
Skin. Eyes. Inhalation. Ingestion.

### Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document  
**Component Information**

iso-Butyl Acetate

CAS No 110-19-0

**LD50/oral/rat** = 15400 mg/kg Oral LD50 Rat

**LD50/oral/mouse** = No information available

**LD50/dermal/rabbit** = > 17400 mg/kg Dermal LD50Rabbit  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50information** = 4763 mg/kg Oral LD50 Rabbit

**Product Information**

**LD50/oral/rat** =  
**Value - Acute Toxicity** = 15400 mg/kg

**LD50/oral/mouse** =  
**Value - Acute Tox** = No information available

**LD50/dermal/rabbit**  
**Value - Acute Toxicity** = > 17400 mg/kg

**LD50/dermal/rat**  
**VALUE - Acute Tox** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**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:** Causes skin irritation.  
**Eye Contact:** Causes eye irritation.  
**Inhalation** Inhalation of vapors may cause drowsiness and dizziness. May cause irritation of respiratory tract.  
**Ingestion** May cause digestive (gastrointestinal) tract irritation.  
**Aspiration hazard** No information available.

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

**Chronic Toxicity** No information available.  
**Sensitization:** No information available.  
**Mutagenic Effects:** No information available  
**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances

iso-Butyl Acetate	110-19-0	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
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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.  
**STOT - repeated exposure** No information available.  
**Target Organs:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

*iso-Butyl Acetate - 110-19-0*

**Fish** LC50: =101mg/L (48h, Leuciscus idus melanotus) LC50: 101 - 123mg/L (48h, Leuciscus idus melanotus)  
**Crustacea** EC50: =168mg/L (24h, Daphnia magna)

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available  
**Other adverse effects** 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
iso-Butyl Acetate	110-19-0	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**  
**UN-No:** UN1213



**Proper Shipping Name:** Isobutyl acetate  
**Hazard Class** 3  
**Subsidiary Class** No information available  
**Packing group:** II  
**Emergency Response Guide Number** 129P  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** IB2, T4, TP1  
**Symbol(s):** No information available  
**Description:** UN1213, Isobutyl acetate, 3, II

**TDG (Canada)**

**UN-No:** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Hazard Class** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No Information available  
**Description:** UN1213, Isobutyl acetate, 3, II

**ADR**

**UN Number** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Transport hazard class(es)** 3  
**Packing group** II  
**Subsidiary Risk:** No information available  
**Description:** UN1213, Isobutyl acetate, 3, II

**IMDG**

**UN-No:** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No information available  
**EMS:** F-E  
**Description** UN1213, Isobutyl acetate, 3, II

**RID**

**UN Number** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Transport hazard class(es)** 3  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Description:** UN1213, Isobutyl acetate, 3, II

**ICAO (air)**

**UN-No:** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Hazard Class** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN1213, Isobutyl acetate, 3, II

**IATA**

**UN Number** UN1213  
**Proper Shipping Name:** Isobutyl acetate  
**Transport hazard class(es)** 3

**Subsidiary Risk:** No information available  
**Packing group** II  
**Precautionary Statements - Response** 3L  
**Special Provisions** No information available  
**Description:** UN1213, Isobutyl acetate, 3, II

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
<i>iso-Butyl Acetate</i>	110-19-0	PresentACTIV E	Present KE-00055	Present	Present (2)-731	Present	Present	Present 203-745-1

**U.S. Regulations**

*iso-Butyl Acetate*

- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: 1041
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Environmental hazard
- Pennsylvania RTK - Environmental Hazard List Present
- Minnesota - Hazardous Substance List: Present
- New York Release Reporting - List of Hazardous Substances:  
5000 lb RQ  
1 lb RQ
- Louisiana Reportable Quantity List for Pollutants: Listed
- California Directors List of Hazardous Substances: Present

**FDA - Direct Food Additives** 21 CFR 172.515  
**FDA - 21 CFR - Total Food Additives** 172.515  
 - List Sourced from EAFUS

**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)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>iso-Butyl Acetate</i>	110-19-0	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	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
<i>iso-Butyl Acetate</i>	110-19-0	5000 lb final RQ 2270 kg final RQ	None	None	None	None

**U.S. TSCA**

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>iso-Butyl Acetate</i>	110-19-0	Not Applicable	Not Applicable

## Canada

### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
iso-Butyl Acetate  
110-19-0 ( 100 )

WHMIS 2015 Hazard Classification  
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.

**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

### DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
iso-Butyl Acetate	110-19-0	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
iso-Butyl Acetate	110-19-0	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
iso-Butyl Acetate	110-19-0	Not listed

### EU Classification

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
iso-Butyl Acetate	110-19-0	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Supplemental Hazards - EUH066 Repeated exposure may cause skin dryness or cracking.607-026-00-7

#### EU - CLP (1272/2008)

#### **R-phrase(s)**

R11 - Highly flammable  
R66 - Repeated exposure may cause skin dryness or cracking  
R36/38 - Irritating to eyes and skin

#### **S -phrase(s)**

S16 - Keep away from sources of ignition - No smoking  
S36 - Wear suitable protective clothing

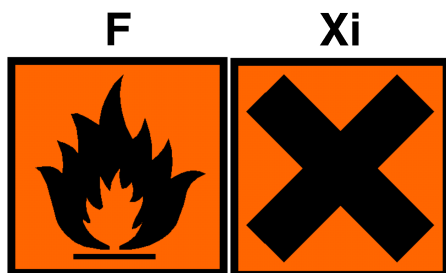
Component	CAS No	Classification	Concentration Limits:	Safety Phrases
iso-Butyl Acetate	110-19-0	F; R11 R66	No information	

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

#### Indication of danger:

F - Highly flammable

Xi - Irritant



## 16. OTHER INFORMATION

**Preparation Date:** 05/21/2019  
**Revision date** 05/21/2019  
**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**