



Biscover LV

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 11/25/2014 Revision date: 04/01/2015 Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Biscover LV

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For professional use only.

1.3. Details of the supplier of the safety data sheet

Bisco, Inc.
1100 W. Irving Park Rd.
Schaumburg, IL 60193
T 847.534.6000 - F 847.891.5049
sales@bisco.com - www.bisco.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - 24-Hour Hazmat Emergency Communications Center
Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 2 H225
Skin Irrit. 2 H315

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02 GHS07

Signal word (GHS-US) : Flammable ; Irritant
Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
Precautionary statements (GHS-US) : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P280 - Wear protective gloves, eye protection
P370+P378 - In case of fire: Use carbon dioxide (CO₂), dry chemical powder, foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose in a safe manner in accordance with local/national regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
ethanol	(CAS No) 64-17-5	50 - 75	Flam. Liq. 2, H225
dipentaerythritol pentaacrylate	(CAS No) 60506-81-2	30 - 50	Skin Irritant 2, H315

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Immediately call a POISON CENTER or doctor/physician. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage. Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
- Explosion hazard : May form flammable/explosive vapor-air mixture.
- Reactivity : Thermal decomposition generates : Corrosive vapors.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

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Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy/while nursing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools.
Hygiene measures	: Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or face shield. Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear approved mask.
Other information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless.
Odor	: characteristic
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapors. fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)

dipentaerythritol pentaacrylate (60506-81-2)	
LD50 oral rat	> 2000 mg/kg (Rat)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

ethanol (64-17-5)	
IARC group	1 - Carcinogenic to Humans

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

ethanol (64-17-5)	
LC50 fish 1	14200 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	9300 mg/l (48 h; Daphnia magna)
LC50 fish 2	13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	10800 mg/l (24 h; Daphnia magna)
Threshold limit other aquatic organisms 1	65 mg/l (72 h; Protozoa)
Threshold limit algae 1	1450 mg/l (192 h; Microcystis aeruginosa; Growth rate)

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ethanol (64-17-5)	
Threshold limit algae 2	5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.70 g O ₂ /g substance
ThOD	2.10 g O ₂ /g substance
BOD (% of ThOD)	0.43 % ThOD

dipentaerythritol pentaacrylate (60506-81-2)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

ethanol (64-17-5)	
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

dipentaerythritol pentaacrylate (60506-81-2)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

ethanol (64-17-5)	
Surface tension	0.022 N/m (20 °C)

12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT	
Transport document description	: UN1170 Ethanol, 3, II
UN-No.(DOT)	: 1170
DOT NA no.	: UN1170
Proper Shipping Name (DOT)	: Ethanol
Department of Transportation (DOT) Hazard Classes	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	: 3 - Flammable liquid



Packing group (DOT)	: II - Medium Danger
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DOT Special Provisions (49 CFR 172.102)	: 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

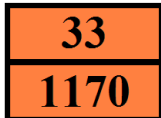
Other information : No supplementary information available.

ADR

Transport document description	: UN 1170, 3, II, (D/E)
Packing group (ADR)	: II
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 33
Classification code (ADR)	: F1
Hazard labels (ADR)	: 3 - Flammable liquids



Orange plates



Tunnel restriction code (ADR)	: D/E
LQ	: 1L
Excepted quantities (ADR)	: E2

Transport by sea

UN-No. (IMDG)	: 1170
Class (IMDG)	: 3 - Flammable liquids

Air transport

UN-No.(IATA)	: 1170
Class (IATA)	: 3 - Flammable Liquids

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

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EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

No additional information available

15.3. US State regulations

SECTION 16: Other information

Revision date : 04/01/2015

Other information : None.

Full text of H-phrases: see section 16:

Flam. Liq. 2	Flammable liquids Category 2
H225	Highly flammable liquid and vapor

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product