

# SAFETY DATA SHEET

## LV Hand Disinfectant

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	28.12.2015
Revision date	28.12.2015

#### 1.1. Product identifier

Product name	LV Hand Disinfectant
Article no.	32. 26815, 26819, 26820

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

Use of the substance / preparation	For repetitive disinfection of hands
------------------------------------	--------------------------------------

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer

Company name	Berner Ltd/Pro
Office address	Hitsaajankatu 24
Postal address	P.O.Box 22
Postcode	00811
City	Helsinki
Country	Finland
Telephone number	+3582079100
Email	<a href="mailto:pro@berner.fi">pro@berner.fi</a>

#### 1.4. Emergency telephone number

Emergency telephone	Telephone number: suora (09) 471 977 Description: HYKS Myrkytystietokeskus puh. (09) 4711 klo. 8.00 - 22.00
---------------------	--

### SECTION 2: Hazards identification

#### 2.1. Classification of substance or mixture

Classification according to 67/548/EEC or 1999/45/EC F; R11;

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319
--	--

## 2.2. Label elements

### Hazard pictograms (CLP)



Composition on the label	ethanol = min74 %, 2-methylpropan-2-ol < 3 %
Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary statements	P233 Keep container tightly closed. P210 Keep away from . No smoking. P305+P351 IF IN EYES: Rinse cautiously with water for several minutes.
Special supplemental label information mixtures	Highly flammable liquid and vapour. Causes serious eye irritation.

## 2.3. Other hazards

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents
ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5	Flam. Liq. 2;H225 Eye Irrit. 2;H319	= min74 %
2-methylpropan-2-ol	CAS No.: 75-65-0 EC No.: 200-889-7 Index No.: 603-005-00-1	Flam. Liq. 2; H225 Acute tox. 4; H332	< 3 %

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation	Move to fresh air.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
Ingestion	Induce vomiting if person is conscious. Consult a physician if necessary. and if person has swallowed the product a lot.

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

General symptoms and effects -

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

Medical treatment

-

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media Use dry chemical, CO<sub>2</sub>, water spray or alcohol foam.

Improper extinguishing media

-

### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards

-

### 5.3. Advice for firefighters

Personal protective equipment Self-contained breathing apparatus

Other information

In the event of fire, cool tanks with water spray.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures

Keep people away from and upwind of spill/leak. Remove all sources of ignition.

### 6.2. Environmental precautions

Environmental precautionary measures

Large spillages: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Other information

Clean-up methods - small spillage : Flush into sewer with plenty of water.  
Clean-up methods - large spillage : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Local authorities should be advised if significant spillages cannot be contained.

### 6.4. Reference to other sections

Other instructions

For suitable protective equipment, see section 8.  
Dispose of waste, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Handling

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Store in conformity with local fire regulations.

### 7.3. Specific end use(s)

Specific use(s)

-

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

Substance	Identification	Value	TWA Year
ethanol	CAS No.: 64-17-5	TWA (8h) : 1000 ppm TWA (8h) : 1900 mg/m <sup>3</sup> <b>OEL short term value</b> Value: 1300 ppm <b>OEL short term value</b> Value: 2500 mg/m <sup>3</sup>	
2-methylpropan-2-ol	CAS No.: 75-65-0	TWA (8h) : 50 ppm TWA (8h) : 150 mg/m <sup>3</sup> <b>OEL short term value</b> Value: 75 ppm <b>OEL short term value</b> Value: 230 mg/m <sup>3</sup>	
Control parameters comments	Eristettävä sytytyslähteistä - Tupakointi kielletty.		

### 8.2. Exposure controls

#### Precautionary measures to prevent exposure

Product related measures to prevent exposure

Handle in accordance with good industrial hygiene and safety practice.

#### Eye / face protection

Required Properties

-

#### Hand protection

Required properties for hand protection

-

#### Skin protection

Skin protection (except hands)

-

#### Respiratory protection

Respiratory protection, general

-

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	clear ,slightly viscous liquid
Odour	astringent
pH	Status: In delivery state

	Comments: not known
Boiling point / boiling range	Comments: 78°C (ethanol)
Flash point	Comments: 12 °C
Lower explosion limit with unit of measurement	Comments: 3,3 t-%
Upper explosion limit with units of measurement	Comments: 19 t-%
Vapour pressure	Comments: 5,9 kPa (20°C) (ethanol)
Specific gravity	Comments: 0,858 kg/dm³ 20°C
Solubility description	completely soluble
Partition coefficient: n-octanol/ water	Comments: Etanoli log Pow = -0,3

## 9.2. Other information

### Other physical and chemical properties

Physical and chemical properties -

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity Stable under normal conditions.

### 10.2. Chemical stability

Stability Stable at normal ambient temperature and pressure.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. . Vapours may form explosive mixture with air.

### 10.5. Incompatible materials

Materials to avoid Strong oxidizers calciumhypochlorite, perchloric acid, krom(VI)oxide, perchlorates.

### 10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

## Other information regarding health hazards

Assessment of acute toxicity, classification	Ethanol: LD50/oral/rat = >10000 mg/kg  LC50/inhalation/8h/rat = 20000 cm³/m³ tert-Buthanol: LD50/oral/rat = 3500mg/kg
Irritation	Can be Irritating to eyes.
General respiratory or skin sensitisation	No sensitisation responses were observed.
Assessment of carcinogenicity, classification	-
STOT-single exposure	Over 1000 ppm ethanol content may cause headache and irritation to eyes and mucous membrane. Ingestion of large amounts may cause alcohol poisoning. Repeated and prolonged use of ethanol will result in cirrhosis of the liver.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecotoxicity	Ethanol LC50/48h/daphnia = 3700-6800 mg/l , LC50/96h/rainbow trout = 14200 mg/l, LOEC (levä) =65 mg/l tert-buthanol: LC 50 (aquatic organism, 96h)>1000 mg/l
-------------	---

### 12.2. Persistence and degradability

Persistence degradability additional information	Ethanol; Hydrolytically stable, T½ is appr.. 4-6 days in the air. tert- buthanol: No information available.
Persistence and degradability, comments	Ethanol: BOD5/COD >0,5; readily biologically degradable. Tert-buthanol No information available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential	Ethanol: log Pow= -0,3, Bioaccumulation is unlikely. tert-Buthanol No information available
---------------------------	---

### 12.4. Mobility in soil

Mobility	Ethanol: As water soluble drifts readily to environment. The product evaporates readily. tert- buthanol: No information available.
----------	--

### 12.5. Results of PBT and vPvB assessment

PBT assessment results	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).
------------------------	---



Legislation and regulations	Highly flammable liquid and vapour. Causes serious eye irritation.
-----------------------------	--

## 15.2. Chemical safety assessment

Chemical safety assessment	-
----------------------------	---

## SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H332 Harmful if inhaled.
--	---

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319
--	--

Additional information	Manufacturer and the label of the product.
------------------------	--

Key literature references and sources for data	REACH MSDS of the raw materials
--	------------------------------------

Information added, deleted or revised	REACH-2010
---------------------------------------	------------

Version	2
---------	---