

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### 3-D Laserscan Entspiegelungsmittel

Revision date: 31.05.2017

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## 1. Identification

### Product identifier

3-D Laserscan Entspiegelungsmittel

### Further trade names

Article No (user):  
119.900.005 (1 L)  
119.900.004 (10 L)

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

#### Use of the substance/mixture

Prüf- und Messtechnik

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

#### Manufacturer

Company name:	Helling GmbH	
Street:	Spoekerdamm 2	
Place:	D-25436 Heidgraben	
Telephone:	+49-4122-922-0	Telefax: +49-4122-922-201
e-mail:	info@helling.de	
Internet:	www.helling.de	

#### Supplier

Company name:	CyberOptics Corporation
Street:	5900 Golden Hills Drive
Place:	USA-MN 55416 Minneapolis
Telephone:	+1 763-542-5000

**Emergency phone number:** GIZ Nord Göttingen +49-(0)551-19240  
(information in German and English)

## 2. Hazard(s) identification

### Classification of the chemical

#### **29 CFR Part 1910.1200**

Flammable liquids: Flam. Liq. 2  
Serious eye damage/eye irritation: Eye Irrit. 2A  
Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)

### Label elements

#### **29 CFR Part 1910.1200**

**Signal word:** Danger

**Pictograms:**



### Hazard statements

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

### Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.

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Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash hands thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Call a poison center/doctor if you feel unwell.  
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.  
In case of fire: Use Water spray, Foam, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>) to extinguish.  
Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to an appropriate recycling or disposal facility.

**Hazards not otherwise classified**

No information available.

**3. Composition/information on ingredients****Mixtures****Hazardous components**

CAS No	Components	Quantity
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	75 - 100 %

**4. First-aid measures****Description of first aid measures****General information**

First aider: Pay attention to self-protection!

**After inhalation**

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After contact with skin**

Wash with plenty of water.

**After ingestion**Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.  
Medical treatment necessary.**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Specific hazards arising from the chemical**Flammable. Vapours may form explosive mixtures with air.  
Decomposition under formation of: Carbon dioxide, Carbon monoxide

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#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### 6. Accidental release measures

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

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

##### Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

##### Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

#### 7. Handling and storage

##### Precautions for safe handling

###### **Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

###### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Provide adequate ventilation. Vapours are heavier than air, spread along floors.

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

###### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

###### **Hints on joint storage**

Do not store together with:

#### 8. Exposure controls/personal protection

##### Control parameters

##### Exposure limits

CAS No.	Substance	ppm	mg/m <sup>3</sup>	f/cc	Category	Origin
67-63-0	Isopropyl alcohol	400	980		TWA (8 h)	PEL
		400	980		TWA (8 h)	REL
		500	1225		STEL (15 min)	REL

##### Exposure controls



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**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Protective and hygiene measures**

Remove contaminated, saturated clothing immediately. When using do not eat or drink. Do not put any product-impregnated cleaning rags into your trouser pockets. Keep away from food, drink and animal feedingstuffs.

**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.

**Hand protection**

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Recommended glove articles NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber) FKM (fluoro rubber)

Unsuitable material: NR (natural rubber, natural latex) PVC (Polyvinyl chloride)

Protect skin by using protective cream.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. When used properly and under normal conditions, respiratory protection is not required.

Respiratory protection is required when limit values can not be complied with. gas filtering equipment Filter type: A (colour: brown)

**Environmental exposure controls**

No information available.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Physical state:

Color: colourless  
Odor: characteristic

pH-Value: not determined

**Changes in the physical state**

Melting point/freezing point: -90 °C

Initial boiling point and boiling range: > 82 °C

Flash point: 13 °C

**Flammability**

Solid: not applicable

Gas: not applicable

**Explosive properties**

Heating causes rise in pressure with risk of bursting.

Lower explosion limits: 2,0 vol. %

Upper explosion limits: 12,0 vol. %

Ignition temperature: 425 °C

**Auto-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

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#### Oxidizing properties

Not oxidising.

 Vapor pressure: 43 hPa  
 (at 20 °C)

 Density (at 20 °C): 0,784 - 0,925 g/cm<sup>3</sup>

Partition coefficient: not determined

Viscosity / dynamic: not determined

Vapor density: not determined

Evaporation rate: not determined

#### Other information

### 10. Stability and reactivity

#### Conditions to avoid

Remove all sources of ignition.

#### Hazardous decomposition products

Carbon monoxide

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 mg/kg	4570	Rat	
	dermal	LD50 mg/kg	13400	Rabbit	
	inhalation (4 h) aerosol	LC50	30 mg/l	Rat	

##### Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

##### Sensitizing effects

Based on available data, the classification criteria are not met.

##### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

##### Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (propan-2-ol; isopropyl alcohol; isopropanol)

##### Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Isopropyl alcohol (CAS 67-63-0) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

##### Aspiration hazard

Based on available data, the classification criteria are not met.

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#### 12. Ecological information

##### Persistence and degradability

The product has not been tested.

##### Bioaccumulative potential

The product has not been tested.

##### Mobility in soil

The product has not been tested.

##### Other adverse effects

No information available.

##### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

#### 13. Disposal considerations

##### Waste treatment methods

###### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

###### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

#### 14. Transport information

##### Marine transport (IMDG)

<u>UN number:</u>	UN 1219
<u>UN proper shipping name:</u>	ISOPROPANOL (ISOPROPYL ALCOHOL), MIXTURE
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	II
Hazard label:	3



Special Provisions:	-
Limited quantity:	1 L
EmS:	F-E, S-D

##### Other applicable information (marine transport)

EQ: E2

##### Air transport (ICAO-TI/IATA-DGR)

<u>UN number:</u>	UN 1219
<u>UN proper shipping name:</u>	ISOPROPANOL (ISOPROPYL ALCOHOL), MIXTURE
<u>Transport hazard class(es):</u>	3
<u>Packing group:</u>	II
Hazard label:	3



Special Provisions:	A180
Limited quantity Passenger:	1 L

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IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

**Other applicable information (air transport)**LQ: Y341  
EQ: E2**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**15. Regulatory information****U.S. Regulations****National regulatory information**

SARA Section 311/312 Hazards:

Isopropyl alcohol (mfg-strong acid process) (67-63-0): Fire hazard, Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Isopropyl alcohol (mfg-strong acid process) (67-63-0): De minimis limit = 1.0 %, Reportable threshold = Standard

**State Regulations****Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**16. Other information****Hazardous Materials Information Label (HMIS)**Health: 1  
Flammability: 2  
Physical Hazard: 1**NFPA Hazard Ratings**Health: 1  
Flammability: 2  
Reactivity: 1  
Unique Hazard:**Changes**Revision date: 31.05.2017  
Revision No: 1,2  
section 1, 2, 3, 6, 8, 11, 12, 16**Abbreviations and acronyms**ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%

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LD50: Lethal dose, 50%

#### Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*