

Helling GmbH

according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Page 1 of 10

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

1.1. Product identifier

3-D Laserscanning Entspiegelungsspray

Further trade names

Article no. (user): 119.990.001 119.990.004

Australian Distributor:Alphabond Dental Pty LtdPh: (02) 9417 6600Alphabond Dental Pty LtdPh: (02) 9417 6600Pt: +61 2 9417 3001Unit 40 / 28 Barcoo Street, Roseville NSW 2069P: +61 2 9417 6660 | F: +61 2 9417 3001Australian Emergency Contact Numbers:Alphabond Dental (Business hours)Phone: 02 9417 6660Alphabond Dental (After hours)Phone: 0412 121 788Emergency Call Service (Australia)Phone: 000

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

Use of the substance/mixture

Testing and measurement technology

1.3. Details of the supplier of the safety data sheet

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	
<u>1.4. Emergency telephone</u> number:	GIZ Nord Göttingen +49-(0)551-19240 (Information in German and English)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 1 Serious eye damage/eye irritation: Eye Irrit. 2 Specific target organ toxicity - single exposure: STOT SE 3 Hazard Statements: Extremely flammable aerosol. Pressurised container: May burst if heated. Causes serious eye irritation. May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling propan-2-ol; isopropyl alcohol; isopropanol

Signal word: Danger

Pictograms:



Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P102 Keep out of reach of children.



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020		Page 2 of 10
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. smoking.	No
P211	Do not spray on an open flame or other ignition source.	
P251	Do not pierce or burn, even after use.	
P271	Use only outdoors or in a well-ventilated area.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses present and easy to do. Continue rinsing.	s, if
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	
P501	Dispose of contents/container to industrial incineration plant.	

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
106-97-8	butane			50 - 60 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220	-		
74-98-6	propane			20 - 25 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
67-63-0	propan-2-ol; isopropyl a	10 - 20 %		
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2			
75-28-5	isobutane			2 - 4 %
	200-857-2	601-004-00-0		
	Flam. Gas 1; H220			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. 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. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

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

Following inhalation: Headache. drowsiness. Dizziness.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

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

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. 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. Vapours may form explosive mixtures with air.

7.2. 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: Oxidising agent

7.3. Specific end use(s)

Inspection of metal surfaces

Page 3 of 10



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Page 4 of 10

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
Consumer DN	EL, long-term	oral	systemic	26 mg/kg bw/day		
Consumer DN	EL, long-term	dermal	systemic	319 mg/kg bw/day		
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³		
Worker DNEL,	, long-term	inhalation	systemic	500 mg/m³		

8.2. Exposure controls





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. After work, wash hands and face.

Eye/face protection

Wear eye/face protection.

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. Recommended protective gloves brand: (Break through time > 480 min) NBR (Nitrile rubber). (0,35 mm) Butyl rubber. (0,5 mm) FKM (fluororubber). (0,4 mm) Recommended protective gloves brand: (Break through time > 240minutes.) CR (polychloroprenes, Chloroprene rubber). (0,5 mm) Unsuitable material: NR (Natural rubber (Caoutchouc), Natural latex). PVC (Polyvinyl chloride). 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. Protect skin by using skin protective cream.

according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Skin protection

Body protection: not required.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: exceeding exposure limit values Suitable respiratory protection apparatus: Filter type: A (colour: brown)

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour:	Aerosol white
Odour:	characteristic
pH-Value:	not determined
Changes in the physical state	
Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not determined
Flammability	
Solid:	not applicable
Gas:	not applicable
Explosive properties Heating causes rise in pressure w	vith risk of bursting. Vapours may form explosive mixtures with air.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature Solid:	not oppliaable
Gas:	not applicable not applicable
Decomposition temperature:	not determined
Oxidizing properties Not oxidising.	
Vapour pressure:	not determined
Density (at 20 °C):	0,925 g/cm³
Water solubility:	slightly soluble
Solubility in other solvents not determined	
Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
9.2. Other information	
Solid content:	~10%
SECTION 40. Stability and reactive	· · · ·

SECTION 10: Stability and reactivity

Page 5 of 10



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

10.1. Reactivity

No risks worthy of mention.

10.2. Chemical stability

No risks worthy of mention.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Remove all sources of ignition. Keep away from heat.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
106-97-8	butane						
	inhalation (4 h) aerosol	LC50	658 mg/l	Rat			
74-98-6	propane						
	inhalation (4 h) vapour	LC50	> 20 mg/l	Rat			
67-63-0	propan-2-ol; isopropyl al	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.

Sensitising 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.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity: No data available

Page 6 of 10



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Page 7 of 10

CAS No	No Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
74-98-6	propane					
	Acute fish toxicity	LC50 > 10 mg/l	00 96 h			
	Acute algae toxicity	ErC50 > 10 mg/l	00			
	Acute crustacea toxicity	EC50 > 10 mg/l	00 48 h			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 897 mg/l	0 96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 >10 mg/l	00 72 h	Scenedesmus subspicatus		
	Acute crustacea toxicity	EC50 >10 mg/l	00 48 h	Daphnia magna		
	Acute bacteria toxicity	(>100 mg/l)				

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,89
74-98-6	propane	2,36
75-28-5	isobutane	2,8

<u>12.4. Mobility in soil</u>

The product has not been tested.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Page 8 of 10

Contaminated packaging

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

SECTION 14: Transport information

Land transport (ADR/RID)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
<u>14.3. Transport hazard class(es):</u>	2
14.4. Packing group:	-
Hazard label:	2.1
	2
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity: Transport category:	E0 2
Tunnel restriction code:	D
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Marine transport (IMDG)	
14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1
Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number:</u>	UN 1950

according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020			Page 9 of 10
14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Hazard label:	AEROSOLS, FLAM	MABLE	
Special Provisions: Limited quantity Passenger: Passenger LQ: Excepted quantity: IATA-packing instructions - Passenger: IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:		203 75 kg 203 150 kg	
14.5. Environmental hazards			
ENVIRONMENTALLY HAZARDOUS: <u>14.6. Special precautions for user</u> No information available. <u>14.7. Transport in bulk according to Anne</u> not applicable	no ex II of Marpol and ti	ne IBC Code	
SECTION 15: Regulatory information			
15.1. Safety, health and environmental re EU regulatory information Restrictions on use (REACH, annex XVI Entry 28: butane; isobutane		n specific for the substance or mixture	
2004/42/EC (VOC):	56 % (518 g/l)		
National regulatory information			
Employment restrictions:	work protection guid		uvenile
Water hazard class (D): 15.2. Chemical safety assessment	1 - slightly hazardou	s lo water	
Total Ononnoul Surety assessment			

For the following substances of this mixture a chemical safety assessment has been carried out: propan-2-ol; isopropyl alcohol; isopropanol

SECTION 16: Other information

Changes

section 6, 11, 14, 15, 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



according to Regulation (EC) No 1907/2006

3-D Laserscanning Entspiegelungsspray

Revision date: 08.10.2020

Page 10 of 10

LC50: Lethal concentration, 50% LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Further Information

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.

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