



## SAFETY DATA SHEET

### MIRROR SPRAY

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

##### 1.1. Product identifier

**Product name** MIRROR SPRAY

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

**Applications** Consistency modifier for dental temporary cement.

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

**Supplier** Kerr Italia S.r.l.  
Via Passanti, 332  
84018 Scafati (SA) - Italy  
Tel: +39-081-850-8311  
E-mail: [safety@kerrhawe.com](mailto:safety@kerrhawe.com)

**Contact person** E-mail: [safety@kerrhawe.com](mailto:safety@kerrhawe.com) (Mobile Phone number 08.00 – 23.00:  
+39-340.1721884)

**Manufacturer** KERRHAWE S.A.  
Via Strecce n°4  
6934 Bioggio (Switzerland)  
Tel: 00-800-41-050-505  
E-mail: [safety@kerrhawe.com](mailto:safety@kerrhawe.com)

##### 1.4. Emergency telephone number

**Emergency telephone number** 112 # The UK National Poisons Emergency number: +44 870 600 6266 WEB:  
<http://www.toxbase.org>  
CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only)  
001-800-424-9300  
International and Maritime Telephone Number +1 (703) 527-3887

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

**Classification according to directives 67/548/EEC, 99/45/EC & 2001/58/EC (DSD/DPD)** -  
R-11  
R-36  
**Classification according to directive 1272/2008 (CLP)** GHS07, GHS02, Warning  
Flam. Aerosol 2: H223  
Eye Irrit. 2: H319

**Hazard** The product is seen as a medical device and therefore not subject to labelling, regulation (EC) no 1272/2008 of the european parliament and of the council, article 1d; Medical devices as defined in Directives 90/385/EEC and 93/42/EEC, which are invasive or used in direct physical contact with the human body, and in Directive 98/79/EC.

##### 2.2. Label elements

CLP

Hazard pictograms

**Signal word**

Warning

**Hazard statements**

Flam. Aerosol 2: H223 Flammable aerosol.  
 Eye Irrit. 2: H319 Causes serious eye irritation.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 P251 Pressurized container: Do not pierce or burn, even after use.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 P412 Do not expose to temperatures exceeding 50°C/ 122°F.

**Contains**

propan-2-ol  
 propane  
 butane  
 isobutane

**2.3. Other hazards****Meets the criteria for vPvB**

No.

**Meets the criteria for PBT**

No.

**Other hazards which do not contribute to classification**

No known risks.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures****Ingredients**

Name	EC No.	CAS No.	Content	Symbol	Classification
propan-2-ol	200-661-7	67-63-0	49-50 %	Xi ,F	R-11, R-36, R-67
propane	200-827-9	74-98-6	9-10 %	F+	R-12
butane	203-448-7	106-97-8	35-40 %	F+	R-12
isobutane	200-857-2	75-28-5	0,5-1 %	F+	R-12

**CLP**

Name	REACH No.	Content	Symbol	Classification	CAS No.
propan-2-ol	01-21194575 58-25	49-50 %	GHS07, GHS02, , Danger	Flam. Liq. 2: H225, Eye Irrit. 2: H319, STOT SE 3: H336	67-63-0
propane	01-21194869 44-21	9-10 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	74-98-6
butane	01-21194746 91-32	35-40 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	106-97-8
isobutane	01-21194853 95-27	0,5-1 %	GHS04, GHS02, , Danger	Flam. Gas 1: H220	75-28-5

Section 16 contains detailed classification phrases.

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

**General** Remove victim immediately from source of exposure. General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.

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

**Specific first aid treatment** No specific first aid measures noted.

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

**Inhalation** Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen.

**Ingestion** Contact physician if larger quantity has been consumed. Promptly get affected personnel to drink large volumes of water to dilute the swallowed chemical.

**Skin** Wash skin with soap and water.

**Eyes** Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

**Extinguishing media** Water spray, fog or mist. Powder, foam or CO<sub>2</sub>.

**Special fire fighting procedures** Avoid water in straight hose stream; will scatter and spread fire.

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

**Specific hazards** HIGHLY FLAMMABLE!

**Hazardous combustion products** Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**5.3. Advice for firefighters**

**Protective measures in fire** Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**Personal protection** Wear appropriate personal protective equipment - see Section 8.

**6.2. Environmental precautions**

**Environmental protection** Do not allow to enter drains, sewers or watercourses.

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

**Spill cleanup methods** For small spills wipe up with paper towel and place in container for disposal. Collect and reclaim or dispose in sealed containers in licensed waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

**6.4. Reference to other sections**

See section 13 for waste handling.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

**Usage precautions** Avoid spilling, skin and eye contact.

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

**Storage precautions** Keep in cool, dry, ventilated storage and closed containers. Store separated from: Oxidising material.  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Keep away from heat, sparks and open flame.

**Storage criteria** Flammable compressed gas storage.

**7.3. Specific end use(s)**

**Specific use(s)** Contact supplier for more information.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
propan-2-ol	67-63-0	WEL.	400/999 ppm/mg/m³	500/1250 ppm/mg/m³	
butane	106-97-8	WEL.	600/1450 ppm/mg/m³	750/1810 ppm/mg/m³	

#### Ingredient comments

WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic

#### Protective equipment



#### Ventilation

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

### 8.2. Exposure controls

#### Respirators

In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3). Standard EN 149.

#### Protective gloves

Use protective gloves made of: Nitrile. Standard EN 374. Time of breakthrough is not known, change gloves regularly. Suitable glove must be chosen in consultation with the gloves supplier, giving information of the breakthrough time for the glove material.

#### Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable. Standard EN 166.

#### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygienic work practices

Wash at the end of each work shift and before eating, smoking and using the toilet.

#### DNEL

No data.

#### PNEC

No data.

## SECTION 9: Physical and chemical properties

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

#### Appearance

Fluid. Aerosol.

#### Colour

Colourless.

#### Odour

Alcohol.

#### Physical data comments

Datas for liquid part.

#### Solubility description

Soluble in water. Miscible with: Alcohol.

#### Boiling point (°C, interval)

~ 82

Pressure

#### Melting/freezing point (°C, interval)

~ -90

#### Density (g/cm³)

0,837

Temperature (°C)

#### Vapour pressure

>4,3 kPa

Temperature (°C)

#### pH-value, conc. solution

7

#### Viscosity (interval)

2,43 mPas

Temperature (°C)

#### Flash point (°C)

-4

Method

### 9.2. Other information

#### Safety information

Not known.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactive groups.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

#### Hazardous polymerisation

Will not polymerise.

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

#### Materials to avoid

Strong oxidising agents.

### 10.6. Hazardous decomposition products

#### Hazardous decomp. products

No hazardous decomposition products are emitted at recommended use and storage conditions.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Sensitization

No allergic reaction is known.

#### Genotoxicity

No known heritable or mutagenic effects.

#### Carcinogenicity

No evidence of carcinogenic properties.

#### Reproduction toxicity

No known hazardous effects on reproduction, fertility or to the unborn child.

#### Inhalation

Vapours may cause drowsiness and dizziness.

#### Ingestion

Not likely, due to the form of the product.

#### Skin

Slightly irritating. Contact with liquid form may cause frostbite.

#### Eyes

Causes serious eye irritation.

#### COMPONENT:

##### propan-2-ol

#### Toxic dose - LD50:

4710 mg/kg (oral rat)

#### Toxic dose - LD50:

12800 mg/kg (skin rat)

#### Toxic dose - LD50 (skin):

12800 mg/kg (skin rabbit)

#### Toxic conc. - LC50:

72,6 mg/l/4h (inhalation rat)

#### COMPONENT:

##### propane

#### Toxic dose - LD50:

>5000 mg/kg (oral rat)

#### Toxic conc. - LC50:

513 mg/l/h (inh rat)

#### COMPONENT:

##### butane

#### Toxicology data

Acute toxicity. LC50. 2 hours. Inhalation. Mouse. 680 mg/l

#### Toxic conc. - LC50:

658 mg/l/4h (inhalation rat)

#### COMPONENT:

##### isobutane

#### Toxic conc. - LC50:

>50 mg/l/4h (inhalation rat)

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicity

Not regarded as dangerous for the environment.

### 12.2. Persistence and degradability

Unknown.

### 12.3. Bioaccumulative potential

Unknown.

**12.4. Mobility in soil****Mobility**

The product is soluble in water. The product is volatile and will evaporate quickly.

**12.5. Results of PBT and vPvB assessment****PTB/vPvB**

Component(s) is not identified as a PBT or vPvB-substance.

**12.6. Other adverse effects**

No known information.

**COMPONENT:**

LC 50, 96 Hrs, Fish mg/l:

**propan-2-ol**

4200 (Rasbora heteromorpha)

EC 50, 48 Hrs, Daphnia, mg/l:

13299 (Daphnia magna)

Bioaccumulative potential

BCF:<100

Partition coefficient (log Pow)

2,97

Persistence and degradability

BOD5/COD: 0,3 - 0,6

84 % deg., 28 days, Method: OECD 301D

**COMPONENT:**

LC 50, 96 Hrs, Fish mg/l:

**propane**

16,9

EC 50, 48 Hrs, Daphnia, mg/l:

16,3

IC 50, 72 Hrs, Algae, mg/l:

11,3

Bioaccumulative potential

BCF: 13,18

Component will not bio-accumulate.

Partition coefficient (log Pow)

2,36

**COMPONENT:**

Bioaccumulative potential

**butane**

BCF:33,88

Partition coefficient (log Pow)

2,89

**COMPONENT:**

LC 50, 96 Hrs, Fish mg/l:

**isobutane**

9,89

EC 50, 48 Hrs, Daphnia, mg/l:

8,96

IC 50, 72 Hrs, Algae, mg/l:

5,94

Bioaccumulative potential

BCF:26,92

Partition coefficient (log Pow)

2,82

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****General/cleaning**

Waste is classified as hazardous waste.

**Disposal methods**

Dispose of in accordance with Local Authority requirements.

**Waste class**

16 05 04\* gases in pressure containers (including halons) containing dangerous substances

18 01 06\* chemicals consisting of or containing dangerous substances

**SECTION 14: Transport information****Label for conveyance****ROAD TRANSPORT (ADR):****14.1. UN number**

UN no. road

1950

UN no. sea

1950

UN no., air

1950

**14.2. UN proper shipping name**

Proper shipping name (international) Aerosols, flammable

#### 14.3. Transport hazard class(es)

ADR class no. 2  
 ADR Hazard labels 2.1  
 Classification code 5F  
 Hazard no. (ADR) 20

#### RAIL TRANSPORT (RID):

RID class no. 2  
 RID Hazard labels 2.1

#### SEA TRANSPORT (IMDG):

IMDG class 2.1  
 EmS no. F-D, S-U

#### TRANSPORT BY INLAND WATERWAYS (ADN):

#### AIR TRANSPORT (IATA-DGR / ICAO-TI):

IATA/ICAO class 2.1

#### 14.4. Packing group

#### 14.5. Environmental hazards

Transport by inland waterways  
 notes Not applicable.

#### 14.6. Special precautions for user

No particular precautions.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No IBC-code for bulk transport offshore (MARPOL).

## SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU directives

Diagnostic medical devices, EU-directive 98/79/EC, EU-regulation 1272/2008, article 1, paragraph 5d, EU-regulation 453/2010/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

#### 15.2. Chemical safety assessment

##### Chemical Safety Assessment

Chemical Safety Report (CSR) has not been carried out for this product.

## SECTION 16: Other information

#### Explanations to R-phrases in section 3

R-11 Highly flammable.  
 R-12 Extremely flammable.  
 R-36 Irritating to eyes.  
 R-67 Vapours may cause drowsiness and dizziness.

#### Explanations to classification in section 3

H220 Extremely flammable gas.  
 H225 Highly flammable liquid and vapour.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.

#### DSD/DPD

#### Labeling

F, Xi,

#### Risk phrases

R-11 Highly flammable.  
 R-36 Irritating to eyes.

#### \* Information revised since the previous version of the SDS

#### Issued by

Essenticon AS, Leif Weldingsvei 18, N-3208 Sandefjord, Norway. E-mail:  
 post@essenticon.no. Phone.: +47 33 42 34 50 - Fax: +47 33 42 34 59  
 www.essenticon.com

**Date of issue** 20.05.2014  
**Safety Data Sheet status** CLP 03 ATP  
**Signature** R. E. Lunde  
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