



Safety Data Sheet Cavalite

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : Cavalite

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

Relevant identified uses

Main use category : Professional use

Use of the substance/mixture : Preparation intended for dental medical use

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T 00-800-41-050-505

Manufacturer

Kerr Italia S.r.l.
Via Passanti, 332
84018 Scafati (SA) - Italy
T +39-081-850-8311

Contact person : safety@kerrhawe.com - tel. 00-800-41-050-505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Skin Sens. 1 H317

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Hazardous ingredients : (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate; 2-hydroxyethyl

	methacrylate; 2-dimethylaminoethyl methacrylate; Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-; 2,2'-ethylenedioxydiethyl dimethacrylate
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction.
Precautionary statements (CLP)	: P261 - Avoid breathing spray, vapours, gas, fume, mist. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of water/... P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
Extra phrases	: The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1272/2008, article 1, paragraph 5d). A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate	(CAS-No.) 24448-20-2 (EC-No.) 246-263-7	1 - 50	Skin Sens. 1, H317
silicon dioxide substance with national workplace exposure limit(s) (GB, IE)	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4 (REACH-no) 01-2119379499-16	1 - 50	Not classified
barium sulphate substance with national workplace exposure limit(s) (GB, IE)	(CAS-No.) 7727-43-7 (EC-No.) 231-784-4 (REACH-no) 01-2119491274-35	1 - 50	Not classified
2-hydroxyethyl methacrylate (Note D)	(CAS-No.) 868-77-9 (EC-No.) 212-782-2 (EC Index-No.) 607-124-00-X (REACH-no) 01-2119490169-29	< 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
2-dimethylaminoethyl methacrylate (Note D)	(CAS-No.) 2867-47-2 (EC-No.) 220-688-8 (EC Index-No.) 607-132-00-3 (REACH-no) 01-2119474677-22	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-	(CAS-No.) 41637-38-1 (EC-No.) 609-946-4 (REACH-no) 01-2119980659-17	< 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Chronic 4, H413
2,2'-ethylenedioxydiethyl dimethacrylate	(CAS-No.) 109-16-0 (EC-No.) 203-652-6 (REACH-no) 01-2119969287-21	< 1	Skin Sens. 1, H317

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Call a POISON CENTER/doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam, carbon dioxide (CO2) and powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable. Hazardous polymerization may occur if exposed to high temperature.

Explosion hazard : Product is not explosive.

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

For non-emergency personnel

Protective equipment : See Heading 8.

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Large spills: scoop solid spill into closing containers.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling : Do not eat, drink or smoke when using this product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Use personal protective equipment as required.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Store in original container. Store in dry protected location to prevent any moisture contact. Keep cool.

Incompatible materials : Oxidizing substances. reducing materials. Organic peroxides. Amines.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

silicon dioxide (7631-86-9)		
Ireland	OEL (8 hours ref) (mg/m³)	2.4 mg/m³

silicon dioxide (7631-86-9)		
United Kingdom	Local name	Silica, amorphous : respirable dust
United Kingdom	WEL TWA (mg/m ³)	2.4 mg/m ³
barium sulphate (7727-43-7)		
Ireland	Local name	Barium sulphate, respirable dust
Ireland	OEL (8 hours ref) (mg/m ³)	2 mg/m ³
United Kingdom	Local name	Barium sulphate
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable dust 4 mg/m ³ respirable dust

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Gloves. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.
- Hand protection : Wear suitable gloves. Nitrile rubber gloves. Layer thickness : 0,09mm. Breakthrough time : >480 min. STANDARD EN 374.
- Eye protection : Safety glasses. STANDARD EN 166.
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust. Standard EN 141.



- Other information : Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Paste.
- Colour : Not determined.
- Odour : slight.
- Odour threshold : Not determined
- pH : Not determined
- Relative evaporation rate (butylacetate=1) : Not determined
- Melting point : Not determined
- Freezing point : Not determined
- Boiling point : Not determined
- Flash point : Not determined
- Auto-ignition temperature : Not determined
- Decomposition temperature : Not determined
- Flammability (solid, gas) : Non flammable
- Vapour pressure : Not determined
- Relative vapour density at 20 °C : Not determined
- Relative density : Not determined
- Solubility : insoluble in water.
- Log Pow : Not determined
- Viscosity, kinematic : Not determined
- Viscosity, dynamic : Not determined
- Explosive properties : Product is not explosive.
- Oxidising properties : Non flammable.
- Explosive limits : Not determined

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May polymerize.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent. reducing materials. Organic peroxides. Amines.

10.6. Hazardous decomposition products

No decomposition if stored and used normally.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Acute toxicity : Not classified

2-hydroxyethyl methacrylate (868-77-9)	
LD50 oral rat	5050 mg/kg
LD50 dermal rabbit	> 3000 mg/kg
2-dimethylaminoethyl methacrylate (2867-47-2)	
LD50 oral rat	1751 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LD50 dermal rabbit	> 3000 mg/kg bodyweight
silicon dioxide (7631-86-9)	
LD50 oral rat	> 15000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met pH: Not determined
Serious eye damage/irritation	: Not classified Liquid splashes in the eye may cause irritation. Based on available data, the classification criteria are not met pH: Not determined
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate (24448-20-2)	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l

2-hydroxyethyl methacrylate (868-77-9)	
LC50 fish 1	227 mg/l (96 hours - Pimephales promelas)
EC50 Daphnia 1	> 280 mg/l Daphnia magna, 48 hours
IC50 algae	836 mg/l 72 hours - Pseudokirchnerella subcapitata
2-dimethylaminoethyl methacrylate (2867-47-2)	
LC50 fish 1	19.1 mg/l Oryzias latipes (Ricefish)
EC50 Daphnia 1	33 mg/l Daphnia magna, 48 hours
silicon dioxide (7631-86-9)	
LC50 fish 1	5000 mg/l (96 hours - Brachydanio rerio, zebra-fish)
EC50 Daphnia 1	7600 mg/l (48 hours - Ceriodaphnia dubia)
IC50 algae	440 mg/l (IC50, 72 hours - Selenastrum capricornutum)
barium sulphate (7727-43-7)	
LC50 fish 1	152 mg/l (96 hours - Brachydanio rerio, zebra-fish)
EC50 Daphnia 1	14.5 mg/l (48 hours - Daphnia magna)

12.2. Persistence and degradability

Cavalite	
Persistence and degradability	No data available.
2-hydroxyethyl methacrylate (868-77-9)	
Biodegradation	84 % (OECD 301D method)
2-dimethylaminoethyl methacrylate (2867-47-2)	
Biodegradation	95.3 % (OECD 301E method)

12.3. Bioaccumulative potential

Cavalite	
Log Pow	Not determined
Bioaccumulative potential	No data.
(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate (24448-20-2)	
Log Pow	> 6.2
2-hydroxyethyl methacrylate (868-77-9)	
Biocentration factor (BCF REACH)	1,3 - 1,5
Log Pow	0.47

12.4. Mobility in soil

Cavalite	
Ecology - soil	Material insoluble in water.

12.5. Results of PBT and vPvB assessment

Cavalite	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Other adverse effects : None to our knowledge.
 Additional information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Regional legislation (waste) : Dispose as hazardous waste.
 Waste treatment methods : Do not discharge into drains.
 Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
 Ecology - waste materials : Avoid release to the environment.
 European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number	
Not regulated for transport	

14.2. UN proper shipping name
14.3. Transport hazard class(es)
14.4. Packing group
14.5. Environmental hazards
No supplementary information available

14.6. Special precautions for user

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

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	2-hydroxyethyl methacrylate - 2-dimethylaminoethyl methacrylate
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Cavalite - 2-hydroxyethyl methacrylate - 2-dimethylaminoethyl methacrylate - Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]- - 2,2'-ethylenedioxydiethyl dimethacrylate
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Poly(oxy-1,2-ethanediyl), α,α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 2015/830 /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

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.3	Other medical advice or treatment	Modified	
7.1	Precautions for safe handling	Modified	
8.2	Personal protective equipment	Modified	

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Date of issue : 10/02/2004

Revision date : 30/10/2017

Supersedes : 09/10/2015

Date of total revision : 30/10/2017

Version : 5.0

Signature : A. Åsebø Murel

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H413	May cause long lasting harmful effects to aquatic life.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.