

SilaPress Bonding**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Commercial product name: SilaPress Bonding

1.2 Relevant identified uses of the substance or mixture and uses advised against: No further information available.

Application of the substance / the mixture: Dental bonding material

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: SILADENT Dr. Böhme & Schöps GmbH
Street / mailbox: Im Klei 26
Country code. / postal code / city: D - 38644 Goslar
Phone: 0 53 21 / 37 79 – 0
Fax: 0 53 21 / 38 96 32
E-mail / Website: info@siladent.de / www.siladent.de
Further information obtainable from: SILADENT Dr. Böhme & Schöps GmbH

1.4 Emergency telephone number

SILADENT Dr. Böhme & Schöps GmbH: +49 (0) 53 21 / 37 79 - 0 (Mon-Fri. 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008:



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour



GHS07

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Skin Sens. 1 H317

STOT SE 3 H335

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:

2.2 Label Elements:

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the CLP regulation.

Hazard pictograms:



GHS02



GHS07

Signal word:

Danger

Hazard-determining components of labelling:

methyl methacrylate
butanone

Hazard statements:

H225

Highly flammable liquid and vapour.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H317

May cause an allergic skin reaction.

H335-H336

May cause respiratory irritation. May cause drowsiness or dizziness.

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Precautionary statements:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national / international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment: PBT: Not applicable
vPvB: Not applicable

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Mixtures				
Description:	Mixture of substances listed below with non-hazardous additions.				
3.3 Dangerous components:					
CAS:78-93-3 EINECS: 201-159-0	<table border="1"> <tr> <td>butanone</td> <td>25-50 %</td> </tr> <tr> <td>  </td> <td></td> </tr> </table>	butanone	25-50 %		
butanone	25-50 %				
					
CAS: 80-62-6 EINECS: 201-297-1	<table border="1"> <tr> <td>methyl methacrylate</td> <td>25-50 %</td> </tr> <tr> <td>  </td> <td></td> </tr> </table>	methyl methacrylate	25-50 %		
methyl methacrylate	25-50 %				
					

Additional Information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

Description of first aid measures	
4.1 General Information	Immediately remove any clothing soiled by the product.
After inhalation:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
After skin contact:	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After eye contact:	Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing:	Do not induce vomiting. Call a doctor immediately.

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4.2 Most important symptoms and effects, both acute and delayed

Headache
Drowsiness
Dizziness
Irritant to skin and eyes
Sensitization possible through skin contact

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, sand extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water.
Water with full jet.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

Advice for fire-fighters:

5.3 Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Keep away from ignition sources. Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: Prevent seepage into sewage system, work pits and cellars. Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents.

6.4 Reference to other sections: See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Avoid contact with skin and eyes.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection: Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

7.2 Storage:

Requirements to be met by storerooms and receptacles: Store between 15 °C and 30 °C at a well ventilated place.
Protect from heat and direct sunlight.

Information about storage in one common

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storage facility:	Not required.
Further information about storage conditions:	Store in cool, dry conditions in well, sealed receptacles.
7.3 Specific end use(s):	No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:	No further data; see item 7.
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8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
78-93-3 butanone	
WEL	Short-term value: 899 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm Sk, BMGV
80-62-6 methyl methacrylate	
WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls Personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the Preparation.

Protective gloves should be changed regularly, especially after intensive contact with the product.
For every workplace a suitable type of protective gloves must be selected.

Material of gloves:

Butyl rubber (0,7 mm) EN 374
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of Several, substances, the resistance of the glove material can't be calculated in advance and has therefore to be checked prior to the application.
As there are many different conditions in every day work these indications can only serve as an aid to orientation for the selection of suitable gloves for the handling of chemical products. By no means can they replace qualifying examinations by the end-user.

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The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Eye protection:

Tightly sealed goggles

Body protection:

Protective work clothing.

SECTION 9: Physical and chemical properties**9.1 Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic.
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition:	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	79°C
Flash point:	- 4°C
Ignition temperature:	430°C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air / formation of vapour mixtures are possible.
Explosion limits:	
Lower:	1,8 Vol %
Upper:	12,5 Vol %
Oxidising properties:	Not determined.
Vapour pressure at 20°C:	105 hPa.
Density at 20°C:	0,89 g/cm ³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol /water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

9.2 Other information:

No further relevant information available.

SECTION 10: Stability and reactivity**10.1 Reactivity:**

No dangerous reactions if used according to specifications.

Chemical stability:

Stable if used according to specifications.

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.
Protect from heat and direct sunlight.

10.2 Possibility of hazardous reactions:

Reacts with oxidizing agents.
Exothermic polymerisation.

10.3 Conditions to avoid:

No further relevant information available.

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10.4 Incompatible materials: No further relevant information available.

10.5 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification: Methylmethacrylat (MMA): LD-50 oral > 5000 mg/kg rat (Lit.)
LC-50 inhalative 7093 ppm/4h rat (Lit.)
alip. Urethanacrylat: LD-50 oral > 2000 mg/kg rat

11.2 Primary irritant effect:

Skin corrosion/irritation: Irritant to skin and mucous membranes.

Serious eye damage/irritation: Irritating effect.

Respiratory or skin sensitisation: Sensitisation possible through skin contact.

Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Fish Toxicity (MMA):
LC-50 > 79 mg/l OECD 203
NOEC: 40 mg/l ISO 7346
Exposure: 96 h EEC84
Species: 449 V, C1
Oncorhynchus mykiss
Bacterial Toxicity: ECO: 100 mg/l
Species of cells: Pseudomonas putida.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

12.5 Additional ecological information:

General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:


Recommendation: Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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European waste catalogue: 070104

13.2 Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number	UN1993
ADR, IMDG, IATA	
14.2 UN proper shipping name	ENTZÜNDBARER FLÜSSIGER STOFF, N.A.G
ADR	(Dampfdruck bei 50°C höchstens 110 kPa)
IMDG, IATA	(ETHYLMETHYLKETON (METHYETHYLKETON), METHYLMETHACRYLAT, MONOMER, STABILISIERT) FLAMMABLE LIQUID, N.O.S: (ETHYL METHYL KETONE (METHYL ETHYL KETONE), METHYL METHACRYLATE MONOMER, STABALIZED)
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	II
ADR, IMDG, IATA	
14.5 Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):	33
EMS Number:	F-E,S-E
14.6 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ):	1L
Excepted quantities (EQ):	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category:	2
Tunnel restriction code:	D/E
IMDG	
Limited quantities (LQ):	1L
Excepted quantities (EQ):	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
14.7 UN "Model Regulation"	UN1993, FLAMMABLE LIQUID, N.O.S (vapour pressure at 50°C not more than 110 kPa) (ETHYL METHYL KETONE (METHYL ETHYL KETONE), METHYL METHACRYLATE MONOMER, STABALIZED)

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.****Directive 2012/18/EU****Named dangerous substances - Annex :** None of the ingredients is listed.**Seveso category:** P5c FLAMMABLE LIQUIDS**Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t****Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t****National regulations:****Information about limitation of use:**

Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed.

Technical instructions (air):

Class	Share in %
NK	25-50

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1 Relevant phrases:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

16.2 Abbreviations and acronyms:

RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO:	International Civil Aviation Organisation
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 Harmonised 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 (division of the American Chemical Society)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Flam. Liq. 2:	Flammable liquids, Hazard Category 2
Skin Irrit. 2:	Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2:	Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1:	Sensitisation - Skin, Hazard Category 1
STOT SE 3:	Specific target organ toxicity - Single exposure, Hazard Category 3