

SilaPrint model LCD**SECTION 1: Identification of the substance/mixture and of the company/undertaking** ***1.1 Product identifier****Commercial product name:** SilaPrint model LCD**1.2 Relevant identified uses of the substance or mixture and uses advised against:** No further relevant information available.**Application of the substance / the mixture:** Material based on methacrylate resin for DLP systems with LED 385 nm and 405 nm for generative manufacturing of dental models**1.3 Details of the supplier of the safety data sheet**

Manufacturer/Supplier: SILADENT Dr. Böhme & Schöps GmbH
Street / mailbox: Im Klei 26
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Phone: +49 (0) 53 21 / 37 79 - 0
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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:**

GHS07

Skin Sens. 1	H317	May cause an allergic skin reaction.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

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:**

GHS07

Signal word:

Warning

Hazard-determining components of labelling:

1,4-Butandiol dimethacrylate
Diurethandimethacrylate
Hydroxypropylmethacrylate, monoester with propane 1,2-diol
Diphenyl(2,4,6-trimethylbenzoyl)phosphineoxide

Hazard statements:

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280:	Wear protective gloves / eye protection.
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P333+P313
P501

If skin irritation or rash occurs: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/
international regulations

2.3 Other hazards:

Uncontrollable exothermic product polymerisation possible in
case of storage above 60°C or exposure to direct sunlight

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.

Dangerous components:		
CAS: 41637-38-1 EC number: 609-946-4	Ethoxylated (04) Bisphenol A Dimethacrylate	50-100%
	Aquatic Chronic 4, H413	
CAS: 2082-81-7 EINECS: 212-218-1	1,4-Butandiol dimethacrylate	2.5-10%
	⚠ Skin Sens. 1, H317	
CAS: 72869-86-4 EINECS: 276-957-5	Diurethandimethacrylate	2.5-10%
	⚠ Skin Sens. 1, H317	
	Acrylic resin	2.5-10%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 27813-02-1 EINECS: 248-666-3	hydroxypropylmethacrylate, monoester with propane-1,2-diol	2.5-10%
	⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 75980-60-8 EINECS: 278-355-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphin oxide	2.5-10%
	⚠ Repr. 2, H361f ⚠ Aquatic Chronic 2, H411; Skin Sens. 1, H317	

Additional information:

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

SECTION 4: First aid measures**4.1 Description of first aid measures****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.

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

No further relevant information available.

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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture:

No further relevant information available.

5.3 Advice for firefighters:

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow product to reach sewage system or any water course.

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.

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:

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
No special measures required.

Information about fire - and explosion protection:

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Protect from heat and direct sunlight.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

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.

8.1 Control parameters:

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment: General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.

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

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

Material of gloves:

Nitrile rubber, NBR (0,4 mm)

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. 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 cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

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:

Goggles recommended during refilling.

Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

Fluid

Colour:

Different according to colouring

Odour:

Characteristic

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Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	200 °C
Flash point:	112 °C
Flammability (solid, gas):	Not applicable.
Ignition temperature:	235 °C
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Oxidising properties	Not determined.
Vapour pressure:	Not determined.
Density at 20 °C:	1.1 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.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic at 23 °C:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	0.0 %

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.
10.2 Chemical stability:	Stable if used according to specifications.
Thermal decomposition / conditions to be avoided:	Protect from heat and direct sunlight. No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	No further relevant information available.
10.5 Incompatible materials:	No further relevant information available.
10.6 Hazardous decomposition products:	No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute toxicity:	Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

75980-60-8 Diphenyl(2,4,6-trimethylbenzoyl)phosphin oxide		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat) ((OECD 402))

Primary irritant effect:

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

Serious eye damage/irritation:	Based on available data, the classification criteria are not met..
Respiratory or skin sensitisation:	May cause an allergic skin reaction.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)	
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
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 further relevant information available.
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.
Additional ecological information:	
General notes:	Do not allow product to reach ground water, water course or sewage system. Harmful to aquatic organisms.
12.5 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	Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

European waste catalogue	
HP 14	Ecotoxic

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

SECTION 14: Transport information

14.1 UN-Number	
ADR, ADN, IMDG, LATA	Void
14.2 UN proper shipping name	
ADR, AND, IMDG, LATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, LATA	

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Class	Void
14.4 Packing group ADR, IMDG, LATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Void

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 I: None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 3

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:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2



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Skin Sens. 1: Skin sensitisation – Category 1

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

* Data compared to the previous version altered.