

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

Commercial product name: SilaPrint guide

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 on methacrylate resin basis for DLP systems with 385nm LED for manufacturing of dental surgical drill guides for tooth-supported and/or teethridge-supported application.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Dreve Dentamid GmbH
Street / mailbox: Max-Planck-Straße 31
Country code. / postal code / city: 59423 Unna / Germany
Phone: +49-2303 / 8807-0
Fax: +49-2303 / 8807-55
Further information obtainable from: Department Research & Development
 Fax: +49-2303 / 8807-562
 Email: sicherheitsdatenblatt@dreve.de

Supplier: SILADENT Dr. Böhme & Schöps GmbH
Street / mailbox: Im Klei 26
Country code. / postal code / city: DE - 38644 Goslar
Phone: +49-5321 / 3779 - 0
Fax: +49-5321 / 38 96 32
E-mail / Website: info@siladent.de / www.siladent.de

1.4 Emergency telephone number

Plant Fire Department Henkel: Tel.: +49-211/797-3350

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

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



GHS07

Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.

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: 2-hydroxyethyl methacrylate
 hydroxypropylmethacrylate, monoester with propane-1,2-diol
 Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxide

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Hazard statements:

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H413	May cause long lasting harmful effects to aquatic life.

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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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 nonhazardous additions.
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Dangerous components:		
CAS: 41637-38-1 EC number: 609-946-4	Ethoxyliertes(04) Bisphenol A Dimethacrylat Aquatic Chronic 4, H413	50-100%
	Acrylic resin ! Eye Irrit. 2, H319	2.5-10%
CAS: 868-77-9 EINECS: 212-782-2	2-hydroxyethyl methacrylate ! Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	2.5-10%
CAS: 27813-02-1 EINECS: 248-666-3	hydroxypropylmethacrylate, monoester with propane-1,2-diol ! Eye Irrit. 2, H319; Skin Sens. 1, H317	2.5-10%
CAS: 75980-60-8 EINECS: 278-355-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphin oxide ! Repr. 2, H361f ! Aquatic Chronic 2, H411; ! Skin Sens.1, H317	≤2.5%

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 watercourse. Inform respective authorities in case of seepage into watercourse or sewage system. 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). Dispose contaminated material as waste according to item 13. 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.

Information about fire - and explosion protection: No special measures required.

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:

Keep container tightly sealed.

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:

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.
Avoid contact with the eyes and skin.

Respiratory protection:

Short term filter device:
Filter A.
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.
These recommendations only apply to the product mentioned in the safety data sheet. When mixing with other substances or under conditions deviant from norm EN 374 a manufacturer of CE-approved gloves should be referred to.
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:

Tightly sealed goggles

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:

Transparent

Odour:

Characteristic

Odour threshold:

Not determined.

pH-value:

Not determined.

Change in condition**Melting point/Melting range:**

Undetermined.

Boiling point/Boiling range:

>100 °C

Flash point:

91 °C

Flammability (solid, gas):

Not applicable.

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/cm³**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.

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10.4 Conditions to avoid:	No further relevant information available.
10.5 Incompatible materials:	Reacts with peroxides and other radical forming substances. Reacts with reducing agents.
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.
Primary irritant effect:	
Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Causes serious eye irritation.
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.
Ecotoxicological effects:	
Remark:	Harmful to fish
Additional ecological information:	
General notes:	Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.
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.
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

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

XVII:

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.

Department issuing SDS:

Department Research & Development

Contact:

Dr. Thomas Veit, Lothar Sutor, Susanne Langesberg

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)

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

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

* Data compared to the previous version altered.