

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

- **Product identifier**
- **Trade name: DentaLub**
- **Article number:** 6597228D3608
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:**
For industrial use only
Metalworking fluid concentrate
For wet processing with dental grinding and milling machines.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
Sirona Dental Systems GmbH
Fabrikstrasse 31
D-64625 Bensheim
Germany
Tel.: +49 (0) 6251/16-0
Fax.: +49 (0) 6251/16-2902
www.dentsplysirona.com
- Manufacturer:
BLASER SWISSLUBE AG
Winterseistrasse 22
CH-3415 Hasle-Rüegsau
Switzerland
Tel.: +41 (0)34 460 01 01
Fax: +41 (0)34 460 01 00
E-mail: blaser@blaser.com
- **Further information obtainable from:**
Product Safety Department
E-mail: reach@blaser.com
- **1.4 Emergency telephone number:**
Switzerland: Abbreviated dialing 145 (or: ++41 (0)44/ 251 51 51) Toxicological Info-Centre CH-Zurich

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture:**
- **Classification according to Regulation (EC) No 1272/2008**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
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 statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

GB

Trade name: DentaLub

(Contd. of page 1)

- **Precautionary statements**

- P280 Wear protective gloves.
- P280 Wear eye protection / face protection.
- P273 Avoid release to the environment.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards** None

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Declarable, or hazardous components:**

- **CAS-no.**

Confidential	Carboxylic acids, neutralized with alkanolamines* Skin Irrit. 2, H315; Eye Irrit. 2, H319	>5.0-<15%
Confidential	Carboxylic acids, neutralized with alkanolamines* Eye Irrit. 2, H319	>1.0-4.9%
EINECS: 223-296-5 Reg.nr.: n.a. (not applicable) BPR	Sodium omadine Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 0.25%
Polymer Reg.nr.: not applicable	Poly quaternary ammonium chloride Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Acute Tox. 4, H332	< 0.25%

- **Additional information:**

* Neutralisation product: Equilibrium of Ionic Pairs according to REACH Annex V, 4.
Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.
For the wording of the listed hazard 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:**

In case of unconsciousness place patient stably in side position for transportation.

Not applicable, as the concentrate is not volatile.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult doctor.

- **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.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

(Contd. on page 3)

Trade name: DentaLub

(Contd. of page 2)

- **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.
- **Additional information** Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **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 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.
- **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**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
Observe the general safety regulations when handling chemicals.
- **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:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Do not store together with oxidising and acidic materials.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Optimal storage temperature between 0 °C and 40 °C.
Minimum shelf life: In closed original container, at least 12 months.
- **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 at the workplace:**
General indication value for metalworking fluids (without obligation): 10 mg/m³.
- **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.
- **Respiratory protection:** Not required.

(Contd. on page 4)

GB

Trade name: DentaLub

(Contd. of page 3)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the resultant standard 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.

The break through, among others, depending on material density and the type of glove and therefore must be determined in each individual case.

Gloves must be inspected prior to use. Replace when worn!

Impervious gloves: nitrile rubber, minimum thickness of 0.3 mm.

· **Penetration time of glove material**

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

· **Eye protection:** Eye protector with side protection (framed eyeglasses) EN 166.

· **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:	Yellowish
Odour:	neutral
Odour threshold:	Not determined.

· **pH-value:** 8.9 - 9.4 @ 50 g/l H₂O (DIN 51369 / ASTM D1287)

· **Change in condition:**

Melting point/Melting range:	Not applicable
Boiling point/Boiling range:	>100 °C (DIN 51751 / ASTM D86)
Drip point:	Not applicable
Pour point:	< 0 °C (ISO 3016 / ASTM D97)

· **Flash point:** >120 °C (ISO 2592 / ASTM D92)
Not applicable (contains water).

· **Flammability (solid, gaseous):** Not applicable.
· **Ignition temperature:** 305 °C (DIN 51794 / ASTM E659)

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits (@1013 mbar):**

Lower:	Not determined.
Upper:	Not determined.

· **Oxidising properties** Not applicable.

· **Vapour pressure:** Not determined.

· **Refractive index:** 1.417

(Contd. on page 5)

Trade name: DentaLub

(Contd. of page 4)

· Density at 20 °C:	1.064 g/cm ³ (DIN 51757 / ASTM D1217)
· Vapour density	Not applicable.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Emulsifiable.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Kinematic at 40 °C:	16.4 mm ² /s (ISO 3104 / ASTM D445)
· 9.2 Other information:	safety relevant data, which has to be considered as product specifications.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** None known if used as directed.
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)

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:**
* pure substance

ATE (Acute Toxicity Estimates)

Dermal	LD50	49547 mg/kg (rabbit)
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Sodium omadine

Oral	LD50	750 mg/kg (rat) Calculated from 40% solution.
Dermal	LD50	700 mg/kg (rabbit) Calculated from 40% solution.
Inhalative	LD50	2.7 mg/L (rat)

Poly quaternary ammonium chloride

Oral	LD50	1951 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LD50	2.9 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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.

(Contd. on page 6)

Trade name: DentaLub

· **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. of page 5)

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
- * pure substance

Benzotriazole*

LC50/96h	180 mg/l (Brachydanio rerio)
NOEC/21d	0.97 mg/l (Daphnia galeata)
NOEC/10d	3.94 mg/l (Lemna minor)
EC50/48h	63-91 mg/L (Daphnia magna)

Sodium omadine

EC50/96h	0.00264 mg/L (Oncorhynchus mykiss) (OECD 203)
EC50/48h	0.0088 mg/L (Daphnia magna) (OECD 202)
EC50/72h	0.0012 mg/L (Algae) (OECD 201)

Poly quaternary ammonium chloride

LC50/96h	0.047 mg/l (Oncorhynchus mykiss) (OECD 203)
EC50/48h	0.37 mg/L (Daphnia magna) (OECD 202)
EC50/72h	0.0019 mg/L (Algae) (OECD 201)

- **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:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
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.
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.

European waste catalogue

12 01 10*	synthetic machining oils
12 01 09*	machining emulsions and solutions free of halogens

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

GB
(Contd. on page 7)

Trade name: DentaLub

(Contd. of page 6)

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	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 Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· IATA	IATA Dangerous Goods Regulation (DGR) 57th Edition 2016
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008:** CLP/GHS label elements are issued under section 2.
- **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
This preparation does not contain any SVHC ("Substances of Very High Concern")
- **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.

- **Regulations / approvals / listings:**

Information on REACH registration numbers in section 3:

In case of lack of REACH registration numbers on mentioned hazardous substances at the end of 2010, then these numbers will be known and indicated only in section 3 within its tonnage band for registration, after the end of 2013, respectively by the end of 2018, or are exempt from the REACH regulation (e.g. polymers).

- **RoHS:**

The product is compliant with European Directives 2011/65/EC, 2002/95/EC, WEEE 2002/96/EC, 2003/11/EC, 2005/53/EC and RoHS.

The following substances ARE NOT contained:

Pentabromodiphenylether, Octabromodiphenylether, polybrominated diphenylether (PDBE) and / or polybrominated biphenyls (PBB), lead or it's compounds, cadmium or it's compounds, mercury or it's compounds, chromium Cr⁶⁺-compounds.

(Contd. on page 8)

Trade name: DentaLub

(Contd. of page 7)

- **Relevant phrases**

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

- **Department issuing SDS:** Product Stewardship

- **Contact:** Dr. Mosimann + Mr. Frei

- **Editor's notice:**

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

- **Abbreviations and acronyms:**

RoHS: Restriction of Hazardous Substances
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 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)
 VOC: Volatile Organic Compounds (USA, EU)
 ISO: International Organisation for Standardisation
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit
 ATE: Acute Toxicity Estimate
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- *** Data compared to the previous version altered.**

The asterisk (*) on the left side indicate the respective changes from the previous version.