

Safety Data Sheet (EC) No. 1907/2006

1. Product- and Company Identification

<u>Trade name:</u>	DC Top-Metalcem (powder), art. No. 702225
<u>Manufacturer:</u>	DC Dental Central Großhandelsges.mbH Carl-Zeiss-Str.2 D-22946 Trittau, Germany
<u>Further information obtainable from:</u>	Tel.: +49 (0)4154/8437 0 Fax: +49 (0)4154/8437 33
<u>Information in case of emergency:</u>	Same as above.

2. Composition/information on ingredients

Dibenzoyl peroxide					
Hazardous Ingredients:					
<u>Description:</u>	<u>CAS-Nr:</u>	<u>Index-No.:</u>	<u>Classification:</u>	<u>R-phrases</u>	<u>Gew.%</u>
Benzoyl peroxide	--	617-008-00-0	Xi	R 36/37/38	--

3. Hazards identification

<u>Hazard denotation</u>	
Xi	irritant
<u>Special hazard for human and environment</u>	
R 36	Irritating to eyes.
R 43	May cause sensitization by skin contact.

4. First aid measures

<u>After inhalation:</u>	fresh air
<u>After skin contact:</u>	Wash off with plenty of water. Remove contaminated clothing.
<u>After eye contact:</u>	Rinse out with plenty of water with eyelid held wide open. Call in ophthalmologist.
<u>After swallowing:</u>	Make victim drink plenty of water, call in physician.

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5. Fire-fighting measures

Suitable extinguishing agents:

Water

For safety reasons unsuitable extinguishing agents:

Foam

Special risks:

Combustible. Fire-promoting. Keep away from combustible materials. Avoid percussion and friction. In the event of decomposition: danger of explosion! Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information:

Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related safety precautions:

Avoid substance contact. Avoid inhalation of dusts.

Environmental-protection measures:

Do not allow to enter sewerage system.

Procedures for cleaning / absorption:

Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Separately or together with other organic peroxides only and away from sources of ignition and heat. Dry. At +15°C to +25°C.

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8. Exposure controls/personal protection

Specific control parameter:

Name: Dibenzoyl peroxide

Sensitization: Sh Danger of sensitization of the skin

Eye protection: Required

Hand

protection:

In full contact:

Glove material: nitrile rubber

Layer thickness: 0.11 mm

Breakthrough time: >480 Min.

In splash contact:

Glove material: nitrile rubber

Layer thickness: 0.11 mm

Breakthrough time: >480 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril (full contact), 740 Dermatril (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de)

Respiratory protection:

Required when dusts are generated

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Other protective equipment:

Antistatic protective clothing

Industrial hygiene:

Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substances.

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9. Physical and chemical properties

<u>Form:</u>	Powder
<u>Colour:</u>	White
<u>Odour:</u>	bitter almond-like
<u>Melting point:</u>	100-105 °C (decomposition)
<u>Boiling Point</u>	not available
<u>Flash point:</u>	not available
<u>Ignition temperature:</u>	>380 °C.
<u>Explosion limits:</u>	lower not applicable upper not applicable
<u>Density:</u>	0.53 g/cm ³
<u>Relative vapour density:</u>	8.4
<u>Bulk density:</u>	500-600 kg/m ³
<u>Solubility in water:</u>	almost insoluble
<u>pH-value at 20°C:</u>	not available
<u>Solvent content:</u>	Organic solvents: 0,0 %
<u>Thermal decomposition:</u>	>70 °C
<u>logPow:</u>	3.46 (experimental)

10. Stability and reactivity

<u>Conditions to be avoided:</u>	Action of light (decomposition) Temperatures above melting point (explosive decomposition)
<u>Substances to be avoided:</u>	Exothermic reaction with: carbon/soot and heat, polymerizable substances. Risk of explosion with: alcohols, amines, polymerization initiators, reducing agents, alkalis, strong acids, organic acids anilines, chloroform, dimethyl sulfoxide, iron(III) compounds, lithium, aluminium hydride, metallic salts.
<u>Hazardous decomposition products:</u>	No information available
<u>Stabilizer:</u>	Water
<u>Further data:</u>	Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

DC Top-Metalcem powder



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11. Toxicological information

<u>Acute toxicity:</u>	LD50: (inhalation, rat): >24.3 mg/l/4 h LD50 (oral, rat): 7710 mg/kg LD50 (oral, rat): >5000 mg/kg
<u>Specific symptoms in animal studies:</u>	Eye irritation test (rabbit): Irritations. Skin irritation test (rabbit). Slight irritations.
<u>Subacute to chronic toxicity</u>	Bacterial mutagenicity: Ames test: negative
<u>After skin contact:</u>	Slight irritations. Risk of sensitization.
<u>After eye contact:</u>	Irritations
<u>After swallowing:</u>	Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
<u>Other notes:</u>	Organic peroxides show alia a more or less strongly pronounced irritant effect on skin and mucous membranes. In some cases it has displayed a sensitizing effect with allergic manifestations in predisposed persons. Mutagenic properties have occurred in some representatives. The product should be handled with care usual when dealing with chemicals.
<u>Further data:</u>	Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Biologic degradation:	
<u>Biodegradation:</u>	83% / 21 d MITI test. Readily biodegradable.
Behavior in environmental compartments:	
<u>Distribution:</u>	log P(o/w): 3.46 (experimental). An appreciable bioaccumulation potential is to be expected (log P o/w) >3).
Ecotoxic effects:	
<u>Biological effects:</u>	Hazard for drinking water supplies. Bacterial toxicity: activated sludge EC10: 2.2 mg/l/30 min.
Further ecologic data:	Do not allow to enter waters, waste water, or soil!

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13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. Transport information

No dangerous cargo accordingly to the transport rules. Store away from food-stuff and stimulants.

15. Regulatory information

Labelling according international regulations GefStoffV/EG:

The product is to be labelled according to the EG-Rules/GefStoffV.

Identification-letter and hazard denotation of the product:

Xi Irritant

R-Phrases:

R 36 Irritating to eyes.
R 43 May cause sensitization by skin contact.

S-Phrases:

S 3/7 Keep container tightly closed. In a cool place.
S 14 Keep away from flammable organic substances.
S 24 Avoid contact with skin.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

16. Other information

Text of any R-phrases referred to under heading 2:

36 Irritating to eyes.
43 May cause sensitization by skin contact.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.