

Vers.No.: 11

Revision: 04.11.2008

1 Identification of the substance/preparation and of the company/undertaking

· Product details

Trade name: SILIKAL POWDER HARDENER

· Application of the substance / the preparation: Catalyst

· Manufacturer/Supplier: Silikal GmbH Ostring 23

D-63533 Mainhausen Tel.: +49-6182/9235-0 Fax.: +49-6182/9235-40 e-mail: mail@silikal.de

· Further information obtainable from: Environmental department

Information in case of emergency: +49 6182 / 9235-0

2 Hazards identification

· Hazard description:



O Oxidising

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 7 May cause fire.

R 36 Irritating to eyes.

R 43 May cause sensitisation by skin contact.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

· Chemical characterization

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components: CAS: 94-36-0 dibenzoyl peroxide Xi, 🌃 E; R 2-36-43 EINECS: 202-327-6 CAS: 84-61-7 dicyclohexyl phthalate EINECS: 201-545-9

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

4 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.

• 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: Drink plenty of water and provide fresh air. Call for a doctor immediately.

(Contd. on page 2)

25-50%

25-50%

Printing date 04.11.2008

Vers.No.: 11

Revision: 04.11.2008

Trade name: SILIKAL POWDER HARDENER

(Contd. of page 1)

5 Fire-fighting measures

- · Suitable extinguishing agents:
- Foam
- Sand
- 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
- Special hazards caused by the substance, its products of combustion or resulting gases: In case of fire, the following can be released:
- Hydrocarbons
- Carbon monoxide and carbon dioxide
- · Protective equipment: Wear self-contained respiratory protective device.
- Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

- Person-related safety precautions:
- Ensure adequate ventilation
- Wear protective clothing.
- Keep away from ignition sources.
- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

- Pick up mechanically.
- Dispose contaminated material as waste according to item 13.
- Do not flush with water or aqueous cleansing agents

7 Handling and storage

· Handling:

- · Information for safe handling:
- Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.
- Information about fire and explosion protection:
 Keep ignition sources away Do not smoke.
 Use explosion-proof apparatus / fittings and spark-proof tools.
- · Storage:
- · Requirements to be met by storerooms and receptacles:
- Store only in the original receptacle. Store in cool, dry conditions in well sealed receptacles. Do not allow to enter sewers/ surface or ground water.
- · Information about storage in one common storage facility:
- Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
- Further information about storage conditions: Store receptacle in a well ventilated area.
- Protect from heat and direct sunlight.
- Maximum storage temperature: 25°C

8 Exposure controls/personal protection

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

Ingredients with limit values that require monitoring at the workplace:

94-36-0 dibenzoyl peroxide

WEL Long-term value: 5 mg/m³

(Contd. on page 3)

GB

Printing date 04.11.2008

Vers.No.: 11

Revision: 04.11.2008

Trade name: SILIKAL POWDER HARDENER

04.04.7 disustati	(Contd. of page
84-61-7 dicyclohe	•
WEL Long-term v	5
Additional inform	ion: The lists valid during the making were used as basis.
Keep away from for Immediately remo Wash hands befor Avoid contact with Respiratory proto Filter AX In case of brief ex	and hygienic measures: dstuffs, beverages and feed. all soiled and contaminated clothing breaks and at the end of work. e eyes and skin. ion: sure or low pollution use respiratory filter device. In case of intensive or long ontained respiratory protective device.
Protecti	gloves
preparation.	has to be impermeable and resistant to the product/ the substance/ the material on consideration of the penetration times, rates of diffusion and times, rates of diffusion and times, rates of diffusion and
Penetration time The exact break t has to be observe Eye protection:	glove material ugh time has to be found out by the manufacturer of the protective gloves ar
Tightly s	aled goggles
Body protection:	rotective work clothing

General Information		
Form: Colour: Odour:	Powder White Weak, characteristic	
Change in condition Melting point/Melting range: Boiling point/Boiling range:		
Flash point:	180°C	
Flammability (solid, gaseous):	May cause fire.	
Decomposition temperature:	60°C	
Self-igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Vapour pressure at 20°C:	1 hPa	

Printing date 04.11.2008

Vers.No.: 11

Revision: 04.11.2008

Trade name: SILIKAL POWDER HARDENER

		(Contd. of page 3)
· Density at 20°C:	1.24 g/cm³	
· Bulk density:	0,56 g/cm³	
 Solubility in / Miscibility v water: 	with Insoluble.	
· Solvent content: Organic solvents:	0.0 %	
· Solids content:	100.0 %	

10 Stability and reactivity

• **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.

Keep away from heat and direct sunlight.

No decomposition if used and stored according to specifications.

- Decomposition starts at: 60 °C
- Materials to be avoided:

Do not store together with reducing agents, heavy-metal compounds, acids and alkalis. Reacts with alkali, amines and strong acids.

- Dangerous reactions: Visible decomposition with spontaneous ignition on heating.
- · Dangerous decomposition products:
- Hydrocarbons

Carbon monoxide and carbon dioxide

· Additional information: Do not allow to enter sewers/ surface or ground water.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values relevant for classification:

94-36-0 dibenzoyl peroxide

Oral LD50 >5000 mg/kg (rat)

Inhalative LC50 (4h) >24.3 mg/l (rat)

· Primary irritant effect:

• on the skin: No irritant effect.

- · on the eye: Irritating effect.
- Sensitization: Sensitization 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

· Sensitisation May cause sensitisation by skin contact.

12 Ecological information

· Ecotoxical effects:

· Acquatic toxicity:

94-36-0 dibenzoyl peroxide

LC50 (96h) 2 mg/l (fish)

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

(Contd. on page 5)

GB

Printing date 04.11.2008

Vers.No.: 11

Revision: 04.11.2008

Trade name: SILIKAL POWDER HARDENER

(Contd. of page 4) Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· Product:

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

· European waste catalogue

16 09 03 peroxides, for example hydrogen peroxide

15 01 02 plastic packaging

· Uncleaned packaging:

Recommendation:

Packaging may be reused or recycled after cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Disposal must be made according to official regulations.

14 Transport information

· Land transport ADR/RID ((cross-border)
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ADR/RID class: 5.2 Organic peroxides.

5.2

- Danger code (Kemler): -
- · UN-Number: 3106
- · Description of goods: 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

· Maritime transport IMDG:

- IMDG Class:
- · UN Number: 3106
- · Packaging group:
- EMS Number: F-J,S-R
- Marine pollutant: No

Proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

· Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: 5.2
- · UN/ID Number: 3106
- · Packaging group:
- Proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:

Xi Irritant

O Oxidising

Hazard-determining components of labelling: dibenzoyl peroxide

· Risk phrases:

7 May cause fire.

GB -

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 04.11.2008

Vers.No.: 11

Revision: 04.11.2008

Trade name: SILIKAL POWDER HARDENER

36 Irrit	ating to eyes.	(Contd. of page 5)
	y cause sensitisation by skin contact.	
3/7 14 22	 <i>y</i> phrases: Keep container tightly closed in a cool place. Keep away from reducing agents, heavy metal compounds, acids Do not breathe dust. Wear suitable protective clothing, gloves and eye/face protection. 	
· Nation	nal regulations:	
Class 	hical instructions (air): s Share in % 25-50 hazard class: Water hazard class 1 (Self-assessment): slightly hazard	irdous for water.
16 Other	r information	
	formation is based on our present knowledge. However, this shall n y specific product features and shall not establish a legally valid contr	
2 Risl 36 Irrita	ant R-phrases k of explosion by shock, friction, fire or other sources of ignition. ating to eyes. y cause sensitisation by skin contact.	
	tment issuing MSDS: Environmental Department ct: Dipl Ing. (FH) Kurt K. Engel	