




1 Identification of substance

- **Product details**
- **Trade name: SILIKAL POWDER HARDENER**
- **Application of the substance / the preparation: Catalyst**
- **Manufacturer/Supplier:**
Silikal America
609-B Fertilla Street
Carrolton, GA 30117
Tel.: 770.830.1404
Fax.: 777.830.9213
info@silikalamerica.com
- **Information department: Silikal America**
- **Emergency information: INFOTRAC 1-800-535-5053**

2 Composition/Data on components

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

- **Dangerous components:**

94-36-0	dibenzoyl peroxide	 Xi,  E,  O; R 3-7-36-43	25-50%
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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**



Xi Irritant
O Oxidizing

- **Information pertaining to particular dangers for man 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 was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 3
Reactivity = 0

The substance possesses oxidizing properties.

- **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 3
Reactivity = 0

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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 copious amounts of water and provide fresh air. Immediately call a doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
Foam
Sand
CO₂, extinguishing 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 material, 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 protection against explosions and fires:**
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.

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- Protect from heat and direct sunlight.
- Maximum storage temperature: 25°C

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Components with limit values that require monitoring at the workplace:

94-36-0 dibenzoyl peroxide

PEL	5 mg/m ³
REL	5 mg/m ³
TLV	5 mg/m ³

- Additional information: The lists that were valid during the creation were used as basis.

- 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 and skin.

- Protection of hands:



Protective gloves

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

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

- Material of gloves

Butyl rubber, BR
Nitrile rubber, NBR

- 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.

- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

9 Physical and chemical properties

- General Information

Form:	Powder
Color:	White
Odor:	Weak, characteristic

- Change in condition

Boiling point/Boiling range: 400°C (752°F)

- Flash point: 180°C (356°F)

- Flammability (solid, gaseous): May cause fire.

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· **Ignition temperature:****Decomposition temperature:** 60°C· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Vapor pressure at 20°C (68°F):** 1 hPa (1 mm Hg)· **Density at 20°C (68°F):** 1.24 g/cm³ (10.348 lbs/gal)· **Bulk density:** 0,56 g/cm³· **Solubility in / Miscibility with Water:** 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 will begin 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 products of decomposition:**

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 that are 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 internally approved calculation methods for preparations:

Irritant

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12 Ecological information

- **Ecotoxicological effects:**

- **Acquatic toxicity:**

94-36-0 dibenzoyl peroxide

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

- **Additional ecological information:**

- **General notes:**

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

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 of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

- **Uncleaned packagings:**

- **Recommendation:**

Packaging can be reused or recycled after cleaning.

Packagings that cannot 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

- **DOT regulations:**

- **Hazard class:** 5.2

- **Identification number:** UN3106

- **Packing group:** II

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

- **Land transport ADR/RID (cross-border):**

- **ADR/RID class:** 5.2 Organic peroxides

- **Danger code (Kemler):** -

- **UN-Number:** 3106

- **Description of goods:** 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

- **Maritime transport IMDG:**

- **IMDG Class:** 5.2

- **UN Number:** 3106

- **Packaging group:** II

- **EMS Number:** F-J,S-R

- **Marine pollutant:** No

- **Propper 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:** II

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· **Propper shipping name:** ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

94-36-0 | dibenzoyl peroxide

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

94-36-0 | dibenzoyl peroxide

A4

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **AGW (German Workplace Threshold Value)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Xi Irritant

O Oxidizing

· **Hazard-determining components of labelling:**

dibenzoyl peroxide

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· **Risk phrases:**

- 7 May cause fire.
- 36 Irritating to eyes.
- 43 May cause sensitisation by skin contact.

· **Safety phrases:**

- 3/7 Keep container tightly closed in a cool place.
- 14 Keep away from reducing agents, heavy metal compounds, acids and alkalis.
- 22 Do not breathe dust.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
II	25-50

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

- **Department issuing MSDS:** Silikal America
- *** Data compared to the previous version altered.**

USA