

Safety Data Sheet

747827/07

Date of issue: December 20, 2006
Revised: December 14, 2006

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*1. Identification of the substance/preparation and the company

SILICA GEL BLUE

Application:
Drying agent

OKER-CHEMIE GMBH
Postfach 2540, 38615 Goslar, GERMANY
Telephone: +49 5321 751 3363 / In case of emergency: +49 5321 751 0

2. Composition/information on ingredients preparation containing

silicid acid, amorphous
weight % > 99
CAS No.: 7631-86-9
hazard symbol: --
R-phrases: --

Index No.: --
EINECS No.: 231-545-4

cobalt dichloride
weight %: 0,2-0,9
CAS No.: 7646-79-9
hazard symbols: T, N
R-phrases: 49(Carc. Cat. 2)-22-42/43-50/53

Index No.: 027-004-00-5
EINECS No.: 231-589-4

*3. Hazards identification

Hazard description:
May cause cancer by inhalation.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Particular hazard information for man and environment:
May produce an allergic reaction.

4. First-aid measures

After inhalation take the patient into the fresh air. Call a doctor if necessary.
In the event of contact with the skin, rinse off with water and soap.
Contamination of the eyes must be treated by thorough irrigation with water, with the eyelids held open.
In case of persistent irritation of the skin and/or eyes seek medical advice.
If product is swallowed consult a doctor.

5. Fire-fighting measures

Suitable extinguishing media:
No restriction in fire situations.
Product is not combustible.

For reasons of security unsuitable extinguishing media:
none

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5. Fire-fighting measures (Continuation)

Special risk due to the substance or the preparation itself, its combustion products or the gas being produced:

In case of fire, cobalt oxide and hydrogen chloride is formed.

Special protective equipment when fighting fires:

Firemen have to wear self-contained breathing apparatus.

further information:

none

6. Accidental release measures

Precautionary measures regarding persons:

Avoid formation and deposition of dust.

Ensure effective ventilation.

Avoid contact with skin and eyes and the inhalation of dust.

Use the personal protective equipment listed in Chapter 8.

Environmental protection measures:

Do not empty into drains or waters.

Methods for cleaning up/taking up:

Take up mechanically; avoid dust formation. Fill into labelled, sealable containers. Note German Technical Regulation on Dangerous Substances No 200/201.

further information:

none

7. Handling and storage

Handling

Information on safe handling:

Avoid formation and deposition of dust. During processing, ensure efficient exhaust ventilation in the working area.

Information on fire and explosion prevention:

none

(to be continued)

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7. Handling and storage (Continuation)

Storage

Requirements on storerooms and containers:

The Wasserhaushaltsgesetz (Water Resources Management Act) and the relevant Landeswassergesetz (local waste water legislation) and the Regulations on Plants for Storing, Filling and Transportation of Substances which are Hazardous to Water must be observed.

Information on common storage:

Observe the rules contained in the VCI concept for separate/common storage. Observe official regulations.

Further information on storage conditions:

Keep in sealed containers in a dry place. Note German Technical Regulation on Dangerous Substances No 514.

storage class according to VCI (Association of the German Chemical Industry): 6.1BS

8. Exposure controls/Personal protection

For exposure controls see Chapter 15.

Respiratory protection: Respiratory equipment with filter type P3 according to DIN EN 143

Hand protection:

Suitable materials for safety gloves:

e.g. Natural rubber, nitrile rubber, butyl rubber

Details of material thickness and breakthrough time:

Not applicable for non-dissolved solids / dusts.

Eye protection: goggle.

9. Physical and chemical properties

tested in accordance with

Form:	granule	
Colour:	blue	
Odour:	odourless	
pH value:	3,5 - 8 (aqueous suspension)	
Melting point:	not determined	
Boiling point:	not determined	
Flash point:	not applicable	A.9
Inflammability:	not determined	
Ignition temperature:	not determined	
Spontaneous flammability:	not determined	
Fire-promoting properties:	not determined	
Explosive limits:	not applicable	
Vapour pressure:	not relevant	
Density:	not determined	
Bulk density:	600 to 700 kg/m ³	
Solubility in water:	approx. 5 g/l	
Fat solubility:	not determined	

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<p>9. Physical and chemical properties (Continuation) tested in accordance with Partition coefficient n-octanol/water not determined</p>
<p>10. Stability and reactivity</p> <p>Conditions to avoid: none known</p> <p>Substances to avoid: none known</p> <p>Hazardous decomposition products: Formation of cobalt oxide and hydrogen chloride possible during thermal decomposition.</p> <p>further information: none</p>
<p>*11. Toxicological information</p> <p>Toxicological studies on the product are not yet available.</p> <p>For risk assessment data of relevant ingredients:</p> <p>Acute toxicity: LD₅₀ oral, rat: 3160 mg/kg (applies to silicid acid, amorphous)</p> <p>LD₅₀ oral, rat: 80 mg/kg (applies to cobalt dichloride)</p> <p>The following results refer to cobalt dichloride.</p> <p>sensitization: cobalt dichloride can sensitize the skin and respiratory passages and cause allergic reactions.</p> <p>Effects after repeated or prolonged exposure: Repeated intake of cobalt dichloride may cause myocardial damage.</p> <p>Carcinogenic effects: In animal tests the product gives an indication for a carcinogenic effect.</p>
<p>*12. Ecological information</p> <p>Ecotoxicological studies of the product are not available.</p>
<p>13. Disposal considerations</p> <p>Unused material: reuse if possible. Address manufacturer.</p> <p>Or:</p> <p>(to be continued)</p>

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13. Disposal considerations (Continuation)

May be disposed of in approved landfills provided local regulations are observed.

14. Transport information

GGVSE: -- UN: -- PG: --

RID/ADR: -- UN: -- PG: --

Warning sign: Hazard no. - --- UN No.: ----

ADNR: -- UN: -- PG: --

GGVSee/IMDG Code: -- UN: -- PG: -- MPO: --

ICAO-TI/IATA-DGR: -- UN: -- PG: --

Declaration for land shipment: --

Declaration for sea shipment: --

Declaration for shipment by air: --

Other information:

Not dangerous cargo. Keep separated from foodstuffs.

*15. Regulatory information

Labelling in accordance with the EEC directives:

Symbol: T, hazard description: toxic

Contains: cobalt dichloride

R 49: May cause cancer by inhalation.

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S 53: Avoid exposure - obtain special instructions before use.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains cobalt dichloride. May produce an allergic reaction.

German regulations

TRGS 900 "Occupational Exposure Limits":

7631-86-9 silicid acid, amorphous

threshold: 4 mg/m³ E

Note remarks

Handling restrictions:

Jugendarbeitsschutzgesetz (JArbSchG) § 22

Mutterschutzrichtlinienverordnung (MuSchRiV) § 5

"Only for professional use"

Major accidents regulations: not listed in the appendices

Technical Instruction on Air Pollution Control:

Figure 5.2.2 Class II

cobalt and his compounds, stated as Co

(to be continued)

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***15. Regulatory information** (Continuation)

Water pollution class (WPC) 1: slightly hazardous to water
(VwVwS addendum 4)

Observe national regulations.

***16. Other information**

Text of all R phrases referred to in sections 2 and 3:

R 49: May cause cancer by inhalation.

R 22: Harmful if swallowed.

R 42: May cause sensitization by inhalation.

R 42/43: May cause sensitization by inhalation and skin contact.

R 43: May cause sensitization by skin contact.

R 50: Very toxic to aquatic organisms.

R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 53: May cause long-term adverse effects in the aquatic environment.

The presented Safety Data Sheet has been altered.

The reason for the alteration is as follows: revised text (see chapter 3, 8, 9, 10, 11, 12, 15 and 16)

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.

Replaces version dated: February 7, 2005