

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: BZn™ S

1.2 Relevant identified uses of the substance or mixture and uses advised

Identified uses: Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Bisor Corporation
5358, Huyi Road,
Shanghai, 201806, P.R.
CHINA

Telephone: +86 21 6183 4121

Fax: +86 21 5186 1853

Email: info@bisorcure.com

Web: www.bisorcure.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No
1272/2008) Acute aquatic toxicity, Category
1, H400

Chronic aquatic toxicity, Category 1, H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification (67/548/EEC or
1999/45/EC) N; R50/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

Reduced labelling (≤ 125 ml)

Hazard pictograms



Index-No. 030-013-00-7

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) N Dangerous for the environment

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

S-phrases 60-61 This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ Safety data sheets.

EC-No. 215-222-5 EC Label

Reduced labelling (≤ 125 ml)

Symbol(s) N Dangerous for the environment

2.3 Other hazards
None known.

3. Composition/information on ingredients

CAS-Nr. Substance identification acc. to EC directive

1314-13-2 Zinc Oxide

7631-86-9 Silica

4. First aid measures

4.1 Description of first aid measures
After inhalation:
fresh air.

After skin contact: wash off with plenty of water. Remove contaminate clothing.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed irritant effects

The following applies to zinc compounds in general: only slightly absorbable via the gastrointestinal tract. Adstringent effect on mucous membranes. Metal-fume fever after inhalation of large quantities.

4.3 Indication of immediate medical attention and special treatment needed No information available.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Observe label precautions.

7.2 Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Storage temperature: no restrictions.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (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<(>,<)> supplied by us and for the designated use. 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.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	power
Colour	white
Odour Threshold	No information available.
Boiling point/boiling range	not applicable, (sublimed)
Flash point	does not flash
Evaporation rate	No information available.

Flammability (solid, gas)	No information available.
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	No information available.
Relative vapour density	No information available.
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	No information available.
Oxidizing properties	No information available.

9.2 Other data

Ignition temperature	not combustible
Bulk density	ca.200 - 700 kg/m ³

10. Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected handling the product according to its intended use.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Violent reactions possible with:
hydrogen peroxide, magnesium

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

no information available

11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

LD50 rat

Dose: > 5.000 mg/kg
(IUCLID)

LDLO human

Dose: 500 mg/kg
(RTECS)

Acute inhalation toxicity

LC0 rat

Dose: $\geq 5 \text{ mg/m}^3$, 3 h
(Lit.)

11.2 Further information

Further information

The following applies to zinc compounds in general: only slightly absorbable via the gastrointestinal tract. Adstringent effect on mucous membranes. Metal-fume fever after inhalation of large quantities.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

12.1 Toxicity

Toxicity to fish

LC50

Species: *Oncorhynchus mykiss* (rainbow trout)

Dose: 1,1 mg/l

Exposure time: 96 h

(ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates.

EC50

Species: *Daphnia magna* (Water flea)

Dose: > 1.000 mg/l

Exposure time: 48 h

(ECOTOX Database)

Toxicity to algae

IC50

Species: *Pseudokirchneriella subcapitata* (green algae)

Dose: 0,17 mg/l

Exposure time: 72 h

(External MSDS)

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Additional ecological information

Do not allow to run into surface waters, wastewater, or soil.

13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

ADR/RID

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

IATA

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

IMDG

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

EmS

F-A S-F

Segregation Group:

0007 Heavy Metals and their salts (incl. their organometallic compounds)

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard

96/82/EC

Legislation

Dangerous for the environment

9a

Quantity 1: 100 t

Quantity 2: 200 t

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

National legislation

Storage class VCI 10 - 13 Other liquids and solids

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

16. Other information

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Bisor Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.bisorcare.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.