

# PT.Nuansa Kimia Sejati Safety Data Sheet

Date of issue:

12.09.2007

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

### *Identification of the product*

Product name:                   :Zinc oxide white seal

### *Use of the substance/preparation*

.Chemical production, Feed, Fertilizer, Plating and analysis

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## 2. Composition/information on ingredients

CAS-No.:                   1314-13-2

*M*:                         81.37 g/mol

EC-No.:                         215-222-5

Formula Hill:           OZn

Chemical formula:   ZnO

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## 3. Hazards identification

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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## 4. First aid measures

After inhalation: fresh air.

After skin contact: Wash off under running water.

After eye contact: rinse out with water.

After swallowing (large amounts): consult doctor if feeling unwell.

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## 5. Fire-fighting measures

Suitable extinguishing media:

In adaption to materials stored in the immediate neighbourhood.

Special risks:

Non-combustible. Ambient fire may liberate hazardous vapours.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:

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

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## 6. Accidental release measures

Person-related precautionary measures:  
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.

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## 7. Handling and storage

*Handling:*

Store protected from solvents.

*Storage:*

Tightly closed. Dry. Storage temperature: no restrictions.

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## 8. Exposure controls/personal protection

*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.

Respiratory protection: required when dusts are generated.

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](http://www.kcl.de)).

Industrial hygiene:

Change contaminated clothing. Wash hands after working with substance.

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## 9. Physical and chemical properties

Form:	solid
Colour:	white or yellowish white
Odour:	odourless
pH value at (25 °C)	~ 7 - 7.5
Melting point	1975 °C
Boiling point	not applicable (sublimed)
Ignition temperature	not combustible
Flash point	not flammable
Explosion limits lower	not applicable
upper	not applicable
Vapour pressure	low
Density (20 °C)	5.57 +/- 0.1 g/cm <sup>3</sup>
Solubility in water (29 °C)	0.0016 g/l

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## 10. Stability and reactivity

*Conditions to be avoided*

none

*Substances to be avoided*

hydrogen peroxide, magnesium.

*Hazardous decomposition products*

no information available

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## 11. Toxicological information

*Acute toxicity*

LC<sub>0</sub> (inhalation, rat): ≥5 mg/m<sup>3</sup> /3 h.

LD<sub>50</sub> (oral, rat): >5000 mg/kg.

LDLo (oral, human): 500 mg/kg.

Specific symptoms in animal studies:

Eye irritation test (rabbit): Slight irritations.

Skin irritation test (rabbit): Slight irritations.

*Subacute to chronic toxicity*

Sensitization:

Experience in man: No sensitizing effect.

Bacterial mutagenicity: Ames test: negative.

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## *Further toxicological information*

After skin contact: Slight irritations.  
After eye contact: Slight irritations.

### Other notes:

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*

The product should be handled with the care usual when dealing with chemicals.

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## **12. Ecological information**

Biologic degradation:  
Inorganic substance. Does not cause biological oxygen deficit.

Ecotoxic effects:  
Quantitative data on the ecological effect of this product are not available.

Biological effects:  
Highly toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.

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.

### *Packaging:*

This product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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## **14. Transport information**

Road & Rail ADR, RID

UN 3077 UMWELTGEFAEHRDENDER STOFF, FEST, N.A.G. (ZINKOXID), 9, III

Inland waterway ADN, ADNR not tested

Sea IMDG-Code

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

Ems F-A S-F

Air CAO, PAX

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

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.

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## 15. Regulatory information

### *Labelling according to EC Directives*

Symbol:	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.

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## 16. Other information

### *Reason for alteration*

General update.

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*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.*