acc. to EC Directive 91/155/EEC

Handelsname: Zinc, granular, 99,5% 31998

Revision of: 04.02.2008

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

Identification of the product

Product name:: Zinc, granular, 99,5%

Use of the substance/preparation: Reagent for analysis

Manufacturer/Supplier:

PHYWE Systeme GmbH & Co. KG Robert-Bosch-Breite 10 D-37079 Göttingen Germany

Tel.: 0049-551/604-0 Fax: 0049-551/604-107

Information Provider:

PHYWE Systeme GmbH & Co. KG, Robert-Bosch-Breite 10, D-37079 Göttingen

Emergency telephone number:

Poisons information centre, Tel.: 0049-551/19240 or contact the poisons information centre in your country

* 2 Composition/information on ingredients

Chemical characterisation of the hazardous ingredient:

CAS-Nr.	Ingredient name
7440-66-6	Zinc

Identification numbers

EC-Nummer: Zink: 231-175-3

Fromula: Zn

Molecular weight: 65,37 g/mol

* 3 Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

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* 4 First aid measures

General notes: Take off contaminated clothing.

After inhalation: Arrange for fresh air, when feeling unwell seek medical advice.

After skin contact: Wash off with plenty of water. Remove contaminated clothing.

After eye contact: Rinse out with plenty of water with the eyelid held wide open.

After swallowing: Rinse mouth with copious water. Immediatley drink plenty of water. Consult

doctor if feeling unwell.

* 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.

* 6 Accidental release measures

Person-related precautionary measures:

Avoid generation of dusts; do not inhale dusts.

Procedures for cleaning / absorption:

Take up dry. Forward for disposal. Clean up affected area.

* 7 Handling and storage

Handling:

No further requirements.

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.

General protective and hygiene measures:

Wash hands before breaks and when work is finished. Change contaminated clothing. Preventive skin protection recommende.

Respiratory protection: required when dusts are generated.

In splash contact:

Eye protection: required

Hand protection: In full contact: Glove material: nitrile rubber

Layer thickness: 0.11 mm

Breakthrough time: > 480 Min.

Glove material: nitrile rubber

Layer thickness: 0.11 mm

Layer thickness: 0.11 mm Breakthrough time: > 480 Min.

Permeation time of the glove material:

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 741 Dermatril[®] L (full contact), 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 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).

Body protection: Customary protective gear suffices.

* 9 Physical and chemical properties

Form: solid, granules
Colour: silver grey
Odour: odourless
pH value: not available
Melting point / range: 419 °C
Boiling point / range: 906 °C
Flash point: not available

Ignition temperature: not available
Explosion limits: lower not available
upper not available

Density: 7,13 g/cm³ (20 °C)

Solubility in water: insoluble Particle size: 3-9 mm

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* 10 Stability and reactivity

Conditions to be avoided:

Moisture.

Substances to be avoided:

Acids (Formed could be: hydrogen (risk of explosion!)).

Alkali hydroxides, air, halogen-halogen compounds, water, acids, halogens, sulfur, chlorates, alkali oxides, carbon disulfide, hydroxylamine, hydrazine and derivatives, ammonium compounds, halogenated hydrocarbons, azides, benzene/benzene derivatives, mercaptans, performic acid.

Hazardous decomposition products:

No information available.

* 11 Toxicological information

Acute toxicity:

Quantitative data on the toxicity of this product are not available.

Subacute to chronic toxicity:

No indication of carcinogenic activity.

No indication of mutagenic activity.

Bacterial mutagenicity: Salmonella typhimurium: negative.

No indication of teratogenic properties.

No impairment of reproductive performance suspected.

Further toxicological information:

After swallowing of large amounts: nausea, vomiting.

After absorption: fever, muscular symptoms, pain, cardiovascular disorders.

On the basis of the morphology of the product, no hazardous properties are to be expected when it is handled and used with appropriate care.

Further data:

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

* 12 Ecological information

Biologic degradation:

Methods for the determination of biodegradability are not applicable to inorganic substances.

Ecotoxic effects:

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

Further ecologic data:

No ecological problems are to be expected when the product is handled and used with due care and attention.

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* 13 Disposal considerations

Product:

Recommendation:

Chemicals must be disposed of in compliance with the respective national regulations.

Uncleaned packaging:

Recommendation: Dispose of according to official regulations

Recommended cleansing agent: Water, with added cleansing agent if mecassary.

* 14 Transport information

Not subject to transport regulations.

* 15 Regulatory information

Labelling according to EC Directives:

Symbol: --R-phrases: --S-phrases: ---

Water hazard classification:

nwg (no hazard to waters) VwVwS Anh. 1 ID-Number: 1349

Storage class VCI: 10-13

* 16 Other information

This information is based on the present status of our knowledge, but does not represent an assurance of product properties and does not give grounds for any contractual legal relationship.

Data sheet prepared by:

PHYWE Systeme GmbH & Co. KG Robert-Bosch-Breite 10 D-37079 Göttingen

Tel.: 0049-551/604211 FAX: 0049-551/604107

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