

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Zineb

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Specific target organ toxicity - single exposure (Category 3)

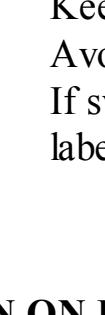
Skin sensitization (Category 1)

According to European Directive 67/548/EEC as amended.

Irritating to respiratory system. May cause sensitization by skin contact.

### Label elements

Pictogram



Signal word

Warning

Hazard statement(s)

H317

May cause an allergic skin reaction.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280

Wear protective gloves.

Hazard symbol(s)

Xi

Irritant

R-phrase(s)

R37

Irritating to respiratory system.

R43

May cause sensitization by skin contact.

S-phrase(s)

S8

Keep container dry.

S24/25

Avoid contact with skin and eyes.

S46

If swallowed, seek medical advice immediately and show this container or label.

Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C4H6N2S4Zn

Molecular Weight : 275,75 g/mol

CAS-No.	EC-No.	Classification	Concentration
<b>Zineb</b> 12122-67-7	235-180-1	- STOT SE 3; Skin Sens. 1; H317, H335 Xi, R37 - R43	-

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

## 4. FIRST AID MEASURES

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protective equipment

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form : crystalline

Colour : yellow

### Safety data

pH : no data available

Melting point : no data available

Boiling point : no data available

Flash point : no data available

Ignition temperature : 149 °C -

Lower explosion limit : no data available

Upper explosion limit : no data available

Vapour pressure : < 0,001 hPa at 20 °C

Water solubility : insoluble

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

Strong oxidizing agentsStrong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Zinc/zinc oxides

### Thermal decomposition

157 °C

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 1.850 mg/kg

Remarks: Behavioral:Excitement. Diarrhoea Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

LD50 Oral - rat - female - 8.900 mg/kg

LD50 Dermal - rat - > 2.500 mg/kg

LD50 Dermal - rat - > 2.500 mg/kg

### Skin corrosion/irritation

Skin - rabbit - No skin irritation

### Serious eye damage/eye irritation

Eyes - rabbit - No eye irritation

### Respiratory or skin sensitization

May cause allergic skin reaction.

May cause allergic skin reaction.

### Germ cell mutagenicity

Genotoxicity in vitro - Ames test - Not mutagenic in Ames Test.

Genotoxicity in vitro - rat - Other cell types

DNA inhibition

Genotoxicity in vitro - Human - lymphocyte

Sister chromatid exchange

Genotoxicity in vitro - Human - lymphocyte

DNA inhibition

Genotoxicity in vitro - Human - fibroblast

Other mutation test systems

Other mutation test systems

Genotoxicity in vivo - mouse - Oral

Genotoxicity in vivo - mouse - Intraperitoneal

Genotoxicity in vivo - Human - Inhalation

Genotoxicity in vivo - Human - Inhalation

Genotoxicity in vivo - rat - Intraperitoneal

Genotoxicity in vivo - rat - Intraperitoneal