# DELTA CHEMICALS (PTY) LTD.

CHEMICAL MANUFACTURERS OF: ZINC CHLORIDE COPPER OXYCHLORIDE Reg. No. 86/01984/07

SPECIFICATION

ACTIVE INGREDIENT : COPPER OXYCHLORIDE 850G/KG (85%)

Description : Light green, odourless, non-flammable, fine powder. The product consists of a homogeneous mixture

homogeneous mixture containing copper oxychloride as the sole active ingredient together with the necessary

formulants.

Copper Content :  $50 \pm 2.5\% \text{ m/m}$ 

pH of 1% suspension : 6.0 minimum

Particle size : 60% Less than 2 micron 95% Less than 5 micron

Surface Area : 30 000cm<sup>2</sup>/g min.

Suspensibility : Not less than 85% remains in

suspension after Tropical storage when tested with

standard hard water. (CIPAC 1 MT 15.1 PAGE 861)

Moisture Content : 2,0% (Maximum)

Wet Sieve Test : Not more than 0.05% m/m

retained on a 100 mesh B.S.

Sieve.

Wetting Time : 30 Seconds (maximum)

(CIPAC 1 MT 53.3 PAGE 966)

Lead : 250 p.p.m. Maximum.

Free Copper : 50 p.p.m. Maximum.

Arsenic : Not detectable.

Cadmium : Not detectable.

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## MATERIAL SAFETY DATA SHEET

# **DELTA CHEMICALS (PTY) LTD**

COMPANY DETAILS

P O BOX 598 MEYERTON 1960 SOUTH AFRICA TEL: (016) 362 0707

FAX: (016) 362 1239

DATE:

## **DEMILDEX**

## PRODUCT IDENTIFICATION

Trade Name:

Demildex

Cas No:

1332-40-7

Chemical Family: Chemical Name: Copper Compound Copper Oxychloride

NIOSH No: Hazchem No: Not applicable

UN No:

Not applicable Not applicable

#### COMPOSITION

Hazardous Components:

Copper (Cu) present as Copper Oxychloride

EEC Classification:

Not applicable Not applicable

R Phrases:

#### 3. HAZARDS IDENTIFICATION

Main Hazard:

The ingestion of a large quantity is followed by nausea and vomiting.

A metallic taste and a burning sensation in the oesophagus and stomach.

Flammability: Non-flammable.

Chemical Hazard:

None, if powder is kept dry. Wet powder is corrosive to most metals.

Biological Hazard:

None.

Reproduction Hazard:

None.

Health Effects

-eyes:

Causes irritation.

- skin:

Causes irritation.

- ingestion:

Causes nausea and vomiting. Additional burning sensation in the

oesophagus and stomach.

- inhalation:

Dust causes irritation.

Carcinogenicity:

Not applicable.

Mutagenicity: Neurotoxicity: Not applicable. Not applicable.

#### FIRST AID MEASURES

Product in eye:

Wash eyes immediately with large amounts of water (for at least 15

minutes), occasionally lifting upper and lower lids and then with a diluted

solution of sodium bicarbonate.

Product on skin: Product ingested: Remove contaminated clothing and wash affected area with soap and water.

The stomach should be emptied by aspiration and lavage and demulcents

such as milk or egg white should be given freely.

Product inhaled:

Move person to fresh air.

#### AE FIGHTING MEASURES

Extinguishing Media: Dry chemical powder, carbon dioxide, water spray or regular foam.

For larger fires use water spray, fog or regular foam.

Special Hazards: Negligible fire hazard when exposed to heat or flame.

Toxic and irritating vapours are generated when heated. Thermal decomposition may release corrosive chlorine gas.

Protective Clothing: Appropriate full body protection and a self-contained breathing apparatus

must be worn.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid breathing dust, wear dust mask if necessary.

Avoid contact with eyes wear goggles if necessary.

Avoid contact with skin; wear rubber gloves and long sleeved shirt and

trousers.

**Environmental Precautions:** 

Do not allow to enter drains, sewers or watercourses.

Small Spills: Large Spills:

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Sweep spills up, place in clean container and remove to chemical waste site. Sweep spills up, place in clean container and remove to chemical waste site.

## HANDLING AND STORAGE

Suitable Material: Wear rubber gloves and dust mask when preparing the spray, in a well-

ventilated area.

Handling/Storage Precautions: Store in a dry and well-ventilated area under lock and key.

Avoid overheating and do not store for long periods in direct sunlight. Shelf life is 2 years. Moisture or heat may cause decomposition.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure: Wash exposed parts of body with water and soap after handling.

Engineering Control Measures: Provide adequate ventilation.

Personal Protection:

respiratory: Avoid breathing dust. Wear dust mask if necessary.

hand: Wear rubber gloves when preparing the spray.

- eye: Avoid contact with eyes. Wear safety goggles if necessary.- skin: Avoid contact with skin. Wear long sleeved shirts and trousers.

Other Protection: Incompatible with strong acids or bases.

After use and before eating, drinking or smoking wash arms and face with

soap and water.

Wash contaminated clothing each day after use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light green fine powder

Odour: None

pH: 6 minimum to 9.5 Boiling point: Not applicable.

Melting point:
Not applicable.
Not applicable.
Plash point:
Not applicable.
Not applicable.
Not flammabile.

Explosive properties: Not applicable.
Oxidising properties: Not relevant.
Vapour pressure: Not applicable.

Density: 0,7 to 0,8 Kg/litre.

Solubility: Insoluble. Solubility-coefficient: 10<sup>-12</sup>

Neurotoxicity: Not applicable.

# STABILITY AND REACTIVITY

Conditions to avoid: Incompatible materials: Attacks most common metals when dispersed in water.

Hazardous decomposition products:

Thermal decomposition may release chloride gas fumes.

#### TOXICOLOGICAL INFORMATION 11.

Acute Toxicity:

- inhalation:

Dust will cause irritation and coughing.

- ingestion:

The ingestion of a large quantity of Copper Oxychloride is followed by nausea and vomiting. A metallic taste and a burning sensation in the

oesophagus and stomach. LD50 value = 1 667mg/Kg.

Skin and eye contact:

Powder is irritating to skin. Dust is irritating to eyes.

Chronic Toxicity:

Frequent persistent contact with the skin can cause skin irritation.

Carcinogenicity: Mutagenicity:

Not Applicable. Not Applicable.

Reproductive hazards:

Unknown.

### **ECOLOGICAL INFORMATION**

Aquatic Toxicity:

- fish:

180 ppm Blue Gill, Salmo Trutta, Salmo Gairdnerii.

Large discharges in suspension may be fatal to fish.

- daphnia:

Large discharges might influence aquatic organisms. Large discharges might influence aquatic plants.

- algae: Bioaccumulation:

Does not bio-accumulate. Mobility:

Dust cloud is mobile when driven by wind.

German WGK:

Not applicable.

#### 13. DISPOSAL CONSIDERATIONS

Disposal Methods:

Bury in an approved landfill, avoiding contamination of waterways.

Disposal of Packaging:

The packing units should be completely emptied (drop-free, cleaned with a

towel).

The packing material should be recycled or re-used, in accordance with the

relevant, applicable local/national regulations.

# TRANSPORT INFORMATION

In the eyes of the International Transport Confederation this product is considered non-hazardous.

#### 15. REGULATORY INFORMATION

EEC Hazard:

Corrosive.

#### 16. OTHER INFORMATION

Information in this publication is believed to be accurate and given in good faith, and does not represent any guarantee or properties.