



Messingoxyd
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Rowmark BVBA

Schaarbeekstraat 44
9120 Beveren - Waas
Belgium

EMERGENCY PHONE NUMBERS:

Medical: 911
Poison Control: 800-589-3897

Telephone Numbers

Rowmark Customer Service
International

Phone Number

+32 3 210 86 17

Available Hours

7:00am-5:00pm

Application of the substance / the preparation:

Electroplating auxiliary

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization

· **Description:** Mixture of the substances listed below with harmless additions.

· **Dangerous components:**

CAS: 7446-08-4

EINECS: 231-194-7

selenium dioxide

T, N; R 23/25-33-50/53

< 2%

CAS: 7758-99-8

EINECS: 231-847-6

Copper (II)sulphate-Pentahydrate

Xn, Xi, N; R 22-36/38-50/53

< 2.5%

CAS: 7664-38-2

EINECS: 231-633-2

phosphoric acid

C; R 34

2.5-10%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

3. HAZARDS IDENTIFICATION

· **Hazard designation:**

Xi Irritant

N

· **Information pertaining to particular dangers for man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification

guideline for preparations of the EU" in the latest valid version.

R 33 Danger of cumulative effects.

R 36 Irritating to eyes.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



4. FIRST AID MEASURES

General information Instantly remove any clothing soiled by the product.

· **After inhalation** Supply fresh air and call for doctor for safety reasons.

· **After skin contact**

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact**

Rinse opened eye for several minutes under running water. Then consult doctor.

· **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

· **Protective equipment:**

Wear full protective suit.

Put on breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Bring persons out of danger.

· **Measures for environmental protection:**

Do not allow product to reach sewage system or water bodies.

Inform respective authorities in case product reaches water or sewage system.

· **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

· **Additional information:** No dangerous materials are released.

7. HANDLING AND STORAGE

Handling

· **Information for safe handling:** Open and handle container with care

· **Information about protection against explosions and fires:**

No special measures required.

The product is not flammable

· **Storage**

· **Requirements to be met by storerooms and containers:**

Prevent any penetration into the ground.

· **Information about storage in one common storage facility:** Not required.

Further information about storage conditions:

Storage temperature + 5 - + 25 °C

Close container tightly after use.

The products can be stored for 12 months if proper storing conditions are maintained.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Wash hands during breaks and at the end of the work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
Use skin protection cream for preventive skin protection.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
Natural rubber, NR
PVC gloves
Chloroprene rubber, CR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Value for the permeation: Level ≥ 6
- **Not suitable are gloves made of the following materials:**
Leather gloves
Strong gloves
- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Impervious protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form: Fluid

Colour: Light blue

Smell: Characteristic

· **Change in condition**

Melting point/Melting range: Not determined

Boiling point/Boiling range: $> 100^{\circ}\text{C}$

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density at 20°C** 1.08 - 1.12 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value at 20°C:** < 3



10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- **Dangerous reactions** Reacts with strong alkali
- **Dangerous products of composition:** No dangerous decomposition products known

11. TOXICOLOGY INFORMATION

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

7758-99-8 Copper (II)sulphate-Pentahydrate

Oral LD50 300 mg/kg (rat)

Dermal LD50 > 1000 mg/l (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful

effects according to our experience and the information provided to us.

The product shows the following dangers according to the calculation method of the General EC

Classification Guidelines for Preparations as issued in the latest version:
Irritant

12. ECOLOGICAL INFORMATION

- **Ecotoxicological effects:**

7758-99-8 Copper (II)sulphate-Pentahydrate

LC50 (96 h) 0.8 mg/l (Pimephales promelas(fettköpfige Elritze))

- **General notes:**

Do not allow product to reach ground water, water bodies or sewage system.

Toxic for aquatic organisms

13. DISPOSAL CONSIDERATIONS

Product:

- **Recommendation**

Must be specially treated under adherence to official regulations.

Hand over to disposers of hazardous waste.

- **Waste disposal key number:** The waste key numbers are recommendations

- **European waste catalogue**

11 00 00: WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS

AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY

11 01 00: wastes from chemical surface treatment and coating of metals and other

materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)

11 01 99: wastes not otherwise specified



06 00 00: WASTES FROM INORGANIC CHEMICAL PROCESSES

06 03 00: wastes from the MFSU of salts and their solutions and metallic oxides

06 03 99: wastes not otherwise specified

15 00 00: WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

15 01 00: packaging (including separately collected municipal packaging waste)

15 01 10*: packaging containing residues of or contaminated by dangerous substances

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleaning agent:** Water

14. TRANSPORT INFORMATION

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

· **ADR/RID-GGVS/E Class:** 9 Miscellaneous dangerous substances

· **Kemler Number:** 90

· **UN-Number:** 3082

· **Packaging group:** III

· **Label 9**

· **Special marking:** Symbol (fish and tree)

· **Designation of goods:** 3082 UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G.

(Selenioxid, Zinksulfat)

· **Maritime transport IMDG/GGVSea:**

· **IMDG/GGVSea Class:** 9

· **UN Number:** 3082

· **Label 9**

· **Packaging group:** III

· **EMS Number:** F-A,S-F

· **Marine pollutant:** Symbol (fish and tree)

Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(selenium dioxide, zinc sulphate (hydrous) (mono-, hexa-and hepta

hydrate))

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** 9

· **UN/ID Number:** 3082

· **Label 9**

· **Special marking:** Symbol (fish and tree)

· **Packaging group:** III

· **Correct technical name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(selenium dioxide, zinc sulphate (hydrous) (mono-, hexa-and hepta

hydrate))

15. REGULATORY INFORMATION

Designation according to EC guidelines:

· **Code letter and hazard designation of product:**

Xi Irritant

N



· **Risk phrases:**

33 Danger of cumulative effects.

36 Irritating to eyes.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

23 Do not breathe fumes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29 Do not empty into drains.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

57 Use appropriate container to avoid environmental contamination.

60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16. OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

22 Harmful if swallowed.

23/25 Toxic by inhalation and if swallowed.

33 Danger of cumulative effects.

34 Causes burns.

36/38 Irritating to eyes and skin.

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