

# Fehling Solution A

## Health & Safety data sheet

According to EC Directive 91/155/EC and following amendments

Revision Date: 2016-06-01

Reason for Revision: Reviewed Only

### **SECTION 1 - IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY**

**Product name:**

- Mi 553A-020 Fehling Solution A.

**Application:**

- For wine analysis.

**Manufacturer identification:**

Milwaukee Instruments.  
2950 Business Park Drive  
Rocky Mount, NC 27804

### **SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

*Hazardous Ingredients:*

<b>NAME (EC directives)</b>	<b>EC-Index-No.</b>	<b>CAS No.</b>	<b>LABELLING (EC directives)</b>	<b>CONTENT</b>
Copper sulphate pentahydrate	029-004-00-0	7758-98-7	Xn, R: 22-36/38 N, R: 50/53	≥ 1.0% - < 20%

(Full text of R-Phrases in heading 16).

### **SECTION 3 - HAZARD IDENTIFICATION**

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

### **SECTION 4 - FIRST AID MEASURES**

- **After inhalation** : fresh air.
- **After skin contact** : wash off with plenty of water. Remove contaminated clothing.
- **After eye contact** : rinse out with plenty of water for at least 10 minutes with the eyelid held wide open.  
Call in ophthalmologist.
- **After swallowing** : make victim drink plenty of water. Call in physician.

### **SECTION 5 – FIRE-FIGHTING MEASURES**

- **Suitable extinguishing media**
  - In adaptation to materials stored in the neighborhood.
- **Special risks:**
  - Non-combustible.
- **Special protective equipment for fire fighting:**
  - Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
- **Additional information:**
  - Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

### **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

- **Personal precautions:**
  - Do not inhale vapors/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.
- **Environmental precautions:**
  - Take up with liquid-absorbent material.

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#### **SECTION 7 - HANDLING AND STORAGE**

- **Handling:**
  - Do not inhale substance.
  - Avoid generation of vapours/aerosols.
- **Storage:**
  - Tightly closed. Store at room temperature (+15 to +25 °C recommended).

#### **SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

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 established with the respective supplier.

- **Personal protective equipment:**
  - As appropriate to quantity handled.
- **Protective gloves:**
  - Rubber or plastic
- **Industrial hygiene:**
  - Immediately change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.
- **Respiratory protection:**
  - Required when vapors/aerosols are generated.
  - Work under hood.
- **Eye protection:**
  - Goggles or face mask

#### **SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES**

- |                              |               |                           |                          |
|------------------------------|---------------|---------------------------|--------------------------|
| • <b>Appearance</b>          | : blue liquid | • <b>pH value at 20°C</b> | : < 2                    |
| • <b>odor</b>                | : odorless    | • <b>Density at 20°C</b>  | : 1.03 g/cm <sup>3</sup> |
| • <b>Solubility in water</b> | : soluble     | • <b>Flash point</b>      | : NA                     |
| • <b>Melting point</b>       | : ND          | • <b>log Pow</b>          | : ND                     |
| • <b>Boiling point</b>       | : ND          |                           |                          |

#### **SECTION 10 - STABILITY AND REACTIVITY**

- **Conditions to be avoided:**
  - Heating.
- **Hazardous decomposition products:**
  - In the event of fire: see section 5.
- **Substances to be avoided:**
  - Hydroxylamine.
  - The generally known reaction partners of water.

#### **SECTION 11 - TOXICOLOGICAL INFORMATION**

##### *Acute toxicity*

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

##### *Further toxicological information*

Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance(s).

#### **SECTION 12 - ECOLOGICAL INFORMATION**

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

##### APPLICABLE TO MAIN COMPONENT(S):

- The following applies to Copper Sulphate, as the pure substance:

##### *Ecotoxic effects:*

Biological effects: Harmful effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Fungicidal effect.

Fish toxicity: L.idus LC<sub>50</sub>: 0.8 mg/l (calculated on the pure substance).

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Daphnia toxicity: Daphnia magna EC<sub>50</sub>: 0.024 mg/l /48 h (calculated on the pure substance).

Algal toxicity: Sc.quadricauda EC<sub>50</sub>: 0.1 mg/l /4 h (calculated on the pure substance).

DO NOT ALLOW TO ENTER WATERS, WASTE WATERS, OR SOIL!

#### **SECTION 13 - DISPOSAL CONSIDERATIONS**

• **Waste disposal:**

- Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice.
- Handle contaminated packaging in the same way as the substance itself.

#### **SECTION 14 - TRANSPORT INFORMATION**

- **Land transport**                   ADR/RID    : 9, PGII  
  UN-N       : 3316  
  Name       : CHEMICAL KIT
- **Sea transport**                   IMDG       : 9/UN 3316/PGII  
  Name       : CHEMICAL KIT
- **Air transport**                   ICAO/IATA  : 9/UN 3316/PGII  
  Name       : CHEMICAL KIT

These transport data apply to the COMPLETE KIT!

#### **SECTION 15 - REGULATORY INFORMATION**

**Labeling according to EC Directives:**

Symbol:	<b>N</b>	Dangerous for environment.
R-phrases:	51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases:	61	Avoid release to the environment. Refer to special instructions/Safety data sheets.
Contains:	-	

#### **SECTION 16 - OTHER INFORMATION**

• **Text of any R phrases referred to under heading 2:**

- 22 : Harmful if swallowed.
- 36/38 : Irritating to eyes and skin.
- 50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Supersedes edition of** : 07 October 2005.

• **Reasons for revision** : Reviewed only

• **Legend** : NA Not applicable  
              ND Not determined

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.