1 Identification of substance:

- **Product name:** Vario Cu 1 F 10
- **Catalog number:** 251403Y
- **Application of the substance / the preparation:** Reagent for water analysis
- **Supplier:**
  YSI
  1725 Brannum Lane
  Yellow Springs, OH 45387
  USA
  tel: +1 937-767-7241
- **Informing department:**
  MSDSinfo@ysi.com
- **Emergency information:**
  Chemtrec toll free (USA and Canada): (800) 424-9300
  Chemtrec International Telephone Number: 001 703-527-3887 (Collect Calls Accepted)

2 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" (1999/45/EC) in the latest valid version.
- **Classification system**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3 Composition/information on ingredients

- **Description:** Mixture contains anorganic and organic compounds.
- **Dangerous components:** Void
- **REACH - Pre-registered substances** All components are REACH pre-registered.

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly rinse with water.
- **After eye contact** Rinse opened eye for several minutes (at least 10 min) under running water.
- **After swallowing**
  Rinse out mouth and then drink 1-2 glasses of water.
  In case of persistent symptoms consult doctor.
- **The following symptoms may occur:**
  After swallowing of large amounts:
  sickness

(Contd. on page 2)
Product name: Vario Cu 1 F 10

5 Fire fighting measures

- Suitable extinguishing agents
  CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- Special hazards caused by the material, its products of combustion or resulting gases:
  Formation of toxic gases is possible during heating or in case of fire.
  Phosphorus oxides (PxOx)
  Dipotassium oxide
- Protective equipment:
  Wear self-contained breathing apparatus.
  Wear full protective suit.
- Additional information
  Collect contaminated fire fighting water separately. It must not enter drains.
  Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Do not allow product to reach sewage system or water bodies.
- Measures for cleaning/collecting:
  Dispose of contaminated material as waste according to item 13.
  Collect mechanically.
  Ensure adequate ventilation.
- Additional information: No dangerous materials are released.

7 Handling and storage

- Handling
  Information for safe handling: Thorough dedusting.
  Information about protection against explosions and fires: No special measures required.
- Storage
  Requirements to be met by storerooms and containers: Store in cool location.
  Information about storage in one common storage facility: Not required.
  Further information about storage conditions:
  Protect from heat and direct sunlight.
  Store under dry conditions.
  Protect from humidity and keep away from water.
  Protect from the effects of light.
  Recommended storage temperature: 20°C +/- 5°C

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Components with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the compilation were used as basis.
Product name: Vario Cu 1 F 10

- **Personal protective equipment**
- **General protective and hygienic measures**
  Wash hands during breaks and at the end of the work.
  Do not eat, drink or smoke while working.
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Recommended filter device for short term use:** Filter P1
- **Protection of hands:** Preventive skin protection by use of skin-protecting agents is recommended.
- **Material of gloves**
  nitrile rubber, NBR
  Recommended thickness of the material: ≥ 0.11 mm
- **Penetration time of glove material** Value for the permeation: Level ≥ 1 (>10 min)
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

### 9 Physical and chemical properties:

- **Form:** Powder
- **Colour:** Light beige
- **Odour:** Odourless
- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** Not determined
- **Flash point:** Not applicable
- **Danger of explosion:** Product is not explosive.
- **Density:** Not determined
- **Solubility in / Miscibility with Water:** Soluble
- **pH-value (1.2 g/l) at 20°C:** 6.8
- **Solvent content:**
  - Organic solvents: 0.0 %
  - Solids content: 100.0 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **Materials to be avoided:** oxidizing agents
- **Dangerous products of decomposition:**
  Phosphorus oxides
  see chapter 5

### 11 Toxicological information

- **Acute toxicity:** Quantitative data on the toxicity of the preparation are not available.
- **Primary irritant effect:**
  - **on the skin:** slight irritations possible
  - **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.
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 usual precautionary measures should be adhered to general rules for handling chemicals.

12 Ecological information:

- Information about elimination (persistence and degradability):
  Other information: Quantitative data on the ecological effect of this product are not available.
- Behaviour in environmental systems:
  Mobility and bioaccumulation potential:
  Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.
- General notes:
  Water hazard class 2 (German Regulation) (Self-assessment acc. VwVwS Annex 4): hazardous for water.
  Do not allow product to reach groundwater, water bodies or sewage system.
- PBT assessments: no data available
- vPvB assessments: no data available

13 Disposal considerations

- Product:
  Recommendation: Disposal must be made according to official regulations.
- European waste catalogue
  16 05 09 discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
  Uncleaned packagings:
  Recommendation: Disposal must be made according to official regulations.
  Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information

- Land transport ADR/RID (cross-border)
  ADR/RID-GGVS/E Class: -
- Maritime transport IMDG:
  IMDG Class: -
  Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:
  ICAO/IATA Class: -
- Transport/Additional information: Not dangerous according to the above specifications.
### 15 Regulatory information

- **Designation according to EC guidelines:**
  The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

### 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.

- **Sources** International Chemical Safety Cards (ICSCs)
- * Data compared to the previous version altered.