

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Description: **Copper Beryllium foil, alloy C17200**  
Cat No. : **41912**  
Molecular Formula **Cu:Be; 98.1:1.9 wt%**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

### 1.3. Details of the supplier of the safety data sheet

Company Avocado Research Chemicals Ltd.  
(Part of Thermo Fisher Scientific)  
Shore Road, Heysham  
Lancashire, LA3 2XY,  
United Kingdom  
Office Tel: +44 (0) 1524 850506  
Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

##### Physical hazards

Based on available data, the classification criteria are not met

##### Health hazards

|                                                      |                   |
|------------------------------------------------------|-------------------|
| Acute Inhalation Toxicity - Dusts and Mists          | Category 4 (H332) |
| Skin Sensitization                                   | Category 1 (H317) |
| Specific target organ toxicity - (repeated exposure) | Category 2 (H373) |

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## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## **Hazard Statements**

H332 - Harmful if inhaled

H317 - May cause an allergic skin reaction

H350i - May cause cancer by inhalation

H373 - May cause damage to organs through prolonged or repeated exposure

## **Precautionary Statements**

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

## 2.3. Other hazards

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment

Toxicity to Soil Dwelling Organisms

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.2. Mixtures

| Component | CAS No    | EC No             | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567                                                                                      |
|-----------|-----------|-------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copper    | 7440-50-8 | EEC No. 231-159-6 | 98.1     | -                                                                                                                                                                            |
| Beryllium | 7440-41-7 | EEC No. 231-150-7 | 1.9      | Acute Tox. 3 (H301)<br>Acute Tox. 2 (H330)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Skin Sens. 1 (H317)<br>Carc. 1B (H350i)<br>STOT SE 3 (H335)<br>STOT RE 1 (H372) |

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Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                           |                                                                                                                                                  |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General Advice</b>                     | If symptoms persist, call a physician.                                                                                                           |
| <b>Eye Contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                                  |
| <b>Skin Contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.                                |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.                                            |
| <b>Inhalation</b>                         | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.                                     |
| <b>Self-Protection of the First Aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

### 4.2. Most important symptoms and effects, both acute and delayed

May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Not combustible. approved class D extinguishers.

#### **Extinguishing media which must not be used for safety reasons**

Water may be ineffective.

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Heavy metal oxides, Metal oxides.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

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Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. No special precautions required.

## 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

## 6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Pick up and transfer to properly labelled containers.

## 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep away from acids.

Technical Rules for Hazardous Substances (TRGS) 510      Class 13  
Storage Class (LGK) (Germany)

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

| Component | The United Kingdom                                                                                                                         | European Union                          | Ireland                                                                                                                                                                 |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copper    | STEL: 0.6 mg/m <sup>3</sup> 15 min<br>STEL: 2 mg/m <sup>3</sup> 15 min<br>TWA: 1 mg/m <sup>3</sup> 8 hr<br>TWA: 0.2 mg/m <sup>3</sup> 8 hr |                                         | TWA: 0.2 mg/m <sup>3</sup> 8 hr. Cu fume<br>TWA: 1 mg/m <sup>3</sup> 8 hr. Cu dusts and mists<br>STEL: 2 mg/m <sup>3</sup> 15 min<br>STEL: 0.6 mg/m <sup>3</sup> 15 min |
| Beryllium | STEL: 0.006 mg/m <sup>3</sup> 15 min<br>TWA: 0.002 mg/m <sup>3</sup> 8 hr                                                                  | TWA: 0.0002 mg/m <sup>3</sup> (8h) Skin | TWA: 0.0002 mg/m <sup>3</sup> 8 hr.<br>STEL: 0.0006 mg/m <sup>3</sup> 15 min                                                                                            |

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|  |       |  |      |
|--|-------|--|------|
|  | Carc. |  | Skin |
|--|-------|--|------|

## Biological limit values

List source(s):

## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                    | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Copper<br>7440-50-8 ( 98.1 ) |                              | DNEL = 273mg/kg<br>bw/day       |                                | DNEL = 137mg/kg<br>bw/day         |

## Predicted No Effect Concentration (PNEC)

See values below.

| Component                    | Fresh water    | Fresh water sediment          | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture)        |
|------------------------------|----------------|-------------------------------|--------------------|------------------------------------|---------------------------|
| Copper<br>7440-50-8 ( 98.1 ) | PNEC = 7.8µg/L | PNEC = 87mg/kg<br>sediment dw |                    | PNEC = 230µg/L                     | PNEC = 65mg/kg<br>soil dw |

| Component                    | Marine water   | Marine water sediment          | Marine water intermittent | Food chain | Air |
|------------------------------|----------------|--------------------------------|---------------------------|------------|-----|
| Copper<br>7440-50-8 ( 98.1 ) | PNEC = 5.2µg/L | PNEC = 676mg/kg<br>sediment dw |                           |            |     |

## 8.2. Exposure controls

### Engineering Measures

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

No special protective equipment required

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |             |                       |
| Neoprene       |                   |                 |             |                       |
| PVC            |                   |                 |             |                       |

#### Skin and body protection

Long sleeved clothing.

#### Respiratory Protection

No special protective equipment required.

### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Recommended Filter type:** Particulates filter conforming to EN 143

### Small scale/Laboratory use

No personal respiratory protective equipment normally required Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001  
When RPE is used a face piece Fit Test should be conducted

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**Environmental exposure controls** Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                                         |                          |                                   |
|-----------------------------------------|--------------------------|-----------------------------------|
| Physical State                          | Solid                    |                                   |
| Appearance                              | Bronze                   |                                   |
| Odor                                    | Odorless                 |                                   |
| Odor Threshold                          | No data available        |                                   |
| Melting Point/Range                     | No data available        |                                   |
| Softening Point                         | No data available        |                                   |
| Boiling Point/Range                     | No information available |                                   |
| Flammability (liquid)                   | Not applicable           | Solid                             |
| Flammability (solid,gas)                | No information available |                                   |
| Explosion Limits                        | No data available        |                                   |
| Flash Point                             | No information available | Method - No information available |
| Autoignition Temperature                | No data available        |                                   |
| Decomposition Temperature               | No data available        |                                   |
| pH                                      | No information available |                                   |
| Viscosity                               | Not applicable           | Solid                             |
| Water Solubility                        | Insoluble in water       |                                   |
| Solubility in other solvents            | No information available |                                   |
| Partition Coefficient (n-octanol/water) |                          |                                   |
| Vapor Pressure                          | 23 hPa @ 20 °C           |                                   |
| Density / Specific Gravity              | 8.36 g/cm3               | @ 20 °C                           |
| Bulk Density                            | No data available        |                                   |
| Vapor Density                           | Not applicable           | Solid                             |
| Particle characteristics                | No data available        |                                   |

### 9.2. Other information

**Molecular Formula** Cu:Be; 98.1:1.9 wt%  
**Evaporation Rate** Not applicable - Solid

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity** None known, based on information available

**10.2. Chemical stability** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** No information available.  
**Hazardous Reactions** None under normal processing.

**10.4. Conditions to avoid** Incompatible products. Excess heat.

**10.5. Incompatible materials** None known.

**10.6. Hazardous decomposition products** Heavy metal oxides. Metal oxides.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product Information

##### (a) acute toxicity;

|            |                   |
|------------|-------------------|
| Oral       | No data available |
| Dermal     | No data available |
| Inhalation | Category 4        |

#### Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation              |
|-----------|-----------|-------------|------------------------------|
| Copper    | -         | -           | LC50 > 5.11 mg/L ( Rat ) 4 h |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

##### (d) respiratory or skin sensitization;

|             |                          |
|-------------|--------------------------|
| Respiratory | No data available        |
| Skin        | Category 1               |
|             | No information available |

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | EU           | UK | Germany | IARC    |
|-----------|--------------|----|---------|---------|
| Beryllium | Carc Cat. 1B |    | Cat. 1  | Group 1 |

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; Category 2

|                   |            |
|-------------------|------------|
| Route of exposure | Inhalation |
| Target Organs     | Lungs.     |

(j) aspiration hazard; Not applicable  
Solid

**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

### 11.2. Information on other hazards

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Contains a substance which is: Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

| Component | Freshwater Fish                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Water Flea                                    | Freshwater Algae                                                                                                                                   |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Copper    | LC50: = 1.25 mg/L, 96h static (Lepomis macrochirus)<br>LC50: = 0.3 mg/L, 96h semi-static (Cyprinus carpio)<br>LC50: = 0.8 mg/L, 96h static (Cyprinus carpio)<br>LC50: = 0.112 mg/L, 96h flow-through (Poecilia reticulata)<br>LC50: = 0.052 mg/L, 96h flow-through (Oncorhynchus mykiss)<br>LC50: 0.0068 - 0.0156 mg/L, 96h (Pimephales promelas)<br>LC50: < 0.3 mg/L, 96h static (Pimephales promelas)<br>LC50: = 0.2 mg/L, 96h flow-through (Pimephales promelas) | EC50: = 0.03 mg/L, 48h Static (Daphnia magna) | EC50: 0.031 - 0.054 mg/L, 96h static (Pseudokirchneriella subcapitata)<br>EC50: 0.0426 - 0.0535 mg/L, 72h static (Pseudokirchneriella subcapitata) |

### 12.2. Persistence and degradability

#### Persistence Degradability Degradation in sewage treatment plant

Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary  
Insoluble in water, May persist.  
Not relevant for inorganic substances.  
Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

### 12.3. Bioaccumulative potential

May have some potential to bioaccumulate; Product has a high potential to bioconcentrate

### 12.4. Mobility in soil

Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility.

### 12.5. Results of PBT and vPvB assessment

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment.

### 12.6. Endocrine disrupting properties

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

### 12.7. Other adverse effects

#### Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues/Unused

Waste is classified as hazardous. Dispose of in accordance with the European Directives

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|                                       |                                                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Products</b>                       | on waste and hazardous waste. Dispose of in accordance with local regulations.                                                                                                                                                           |
| <b>Contaminated Packaging</b>         | Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition. |
| <b>European Waste Catalogue (EWC)</b> | According to the European Waste Catalog, Waste Codes are not product specific, but application specific.                                                                                                                                 |
| <b>Other Information</b>              | Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.                                                                                     |

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

14.1. UN number  
14.2. UN proper shipping name  
14.3. Transport hazard class(es)  
14.4. Packing group

**ADR** Not regulated

14.1. UN number  
14.2. UN proper shipping name  
14.3. Transport hazard class(es)  
14.4. Packing group

**IATA** Not regulated

14.1. UN number  
14.2. UN proper shipping name  
14.3. Transport hazard class(es)  
14.4. Packing group

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No    | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|-----------|-----------|-----------|--------|-----|-------|------|----------|------|------|
| Copper    | 7440-50-8 | 231-159-6 | -      | -   | X     | X    | KE-08896 | X    | -    |
| Beryllium | 7440-41-7 | 231-150-7 | -      | -   | X     | X    | KE-02829 | X    | -    |

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|-----------|--------|------|-----------------------------------------------|-----|------|------|-------|-------|
|-----------|--------|------|-----------------------------------------------|-----|------|------|-------|-------|

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|           |           |   |        |   |   |   |   |   |
|-----------|-----------|---|--------|---|---|---|---|---|
| Copper    | 7440-50-8 | X | ACTIVE | X | - | X | X | X |
| Beryllium | 7440-41-7 | X | ACTIVE | X | - | X | X | X |

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

## Authorisation/Restrictions according to EU REACH

| Component | CAS No    | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances                                                            | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-----------|-----------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Copper    | 7440-50-8 | -                                                                   | Use restricted. See item 75.<br>(see link for restriction details)                                                                       | -                                                                                                     |
| Beryllium | 7440-41-7 | -                                                                   | Use restricted. See item 28.<br>(see link for restriction details)<br>Use restricted. See item 75.<br>(see link for restriction details) | -                                                                                                     |

## REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

## Seveso III Directive (2012/18/EC)

| Component | CAS No    | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|-----------|-----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Copper    | 7440-50-8 | Not applicable                                                                            | Not applicable                                                                           |
| Beryllium | 7440-41-7 | Not applicable                                                                            | Not applicable                                                                           |

## Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

## Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

## WGK Classification

Water endangering class = non-hazardous to waters (self classification)

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class                                                         |
|-----------|---------------------------------------|---------------------------------------------------------------------------------|
| Copper    | WGK2                                  | Class III : 1 mg/m <sup>3</sup> (Massenkonzentration)                           |
| Beryllium |                                       | Krebserzeugende Stoffe - Class I : 0.05 mg/m <sup>3</sup> (Massenkonzentration) |

| Component | France - INRS (Tables of occupational diseases)      |
|-----------|------------------------------------------------------|
| Beryllium | Tableaux des maladies professionnelles (TMP) - RG 33 |

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| Component                    | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Copper<br>7440-50-8 ( 98.1 ) | Prohibited and Restricted Substances                                                                           |                                                                                 |                                                                                             |

## 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H332 - Harmful if inhaled  
H317 - May cause an allergic skin reaction  
H350 - May cause cancer  
H350i - May cause cancer by inhalation  
H373 - May cause damage to organs through prolonged or repeated exposure  
H301 - Toxic if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H330 - Fatal if inhaled  
H335 - May cause respiratory irritation  
H372 - Causes damage to organs through prolonged or repeated exposure

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadviser - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards** On basis of test data

**Health Hazards** Calculation method

**Environmental hazards** Calculation method

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and

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Copper Beryllium foil, alloy C17200

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hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Prepared By**

Health, Safety and Environmental Department

**Revision Date**

20-Feb-2024

**Revision Summary**

New emergency telephone response service provider.

**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**