

*acc. to OSHA HCS*

Printing date 09/20/2018

Review date 09/20/2018

**1 Identification**

- **Product identifier**
- **Trade name:** COPPER PLUS - WIRE FORM, 567G
- **Article number** 02401362
- **CAS Number:**  
7440-50-8
- **EC number:**  
231-159-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

PerkinElmer, Inc.  
710 Bridgeport Avenue  
Shelton, Connecticut 06484 USA  
CustomerCareUS@perkinelmer.com  
203-925-4600

- **Emergency telephone number:**  
CHEMTREC (within US) 800-424-9300  
CHEMTREC (from outside US) +1 703-527-3887 (call collect)  
CHEMTREC (within AU) +(61)-290372994

**2 Hazard(s) identification**

- **Classification of the substance or mixture**  
*The substance is not classified, according to the Globally Harmonized System (GHS).*

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

|            |   |                |
|------------|---|----------------|
| HEALTH     | 0 | Health = 0     |
| FIRE       | 0 | Fire = 0       |
| REACTIVITY | 0 | Reactivity = 0 |

- **Other hazards**  
*The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· **vPvB:** Not applicable.

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**3 Composition/information on ingredients**

- **Chemical characterization: Substances**
- **CAS No. Description**  
7440-50-8 copper
- **Identification number(s)**
- **EC number:** 231-159-6

**4 First-aid measures**

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
No dangerous substances are released.  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

3 mg/m<sup>3</sup>

· **PAC-2:**

33 mg/m<sup>3</sup>

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· PAC-3:

200 mg/m<sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

### 7440-50-8 copper

|     |  |
|-----|--|
| PEL | Long-term value: 1* 0.1** mg/m <sup>3</sup><br>as Cu *dusts and mists **fume   |
| REL | Long-term value: 1* 0.1** mg/m <sup>3</sup><br>as Cu *dusts and mists **fume   |
| TLV | Long-term value: 1* 0.2** mg/m <sup>3</sup><br>*dusts and mists; **fume; as Cu |

· **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
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.
- **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.

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· Eye protection: Required

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**9 Physical and chemical properties**

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid  
Color: Brown to black  
Odor: Characteristic  
Odor threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: 1,083 °C (1,981.4 °F)  
Boiling point/Boiling range: 2,597 °C (4,706.6 °F)

· Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

· Decomposition temperature: Not determined.

· Auto igniting: Not determined.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.  
Upper: Not determined.

· Vapor pressure at 20 °C (68 °F): 0 hPa (0 mm Hg)

· Density at 20 °C (68 °F): 8.96 g/cm<sup>3</sup> (74.7712 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable.  
Kinematic: Not applicable.  
VOC content: 0.00 %

Solids content: 100.0 %

· Other information: No further relevant information available.

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**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects 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 substance is not subject to classification.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

Substance is not listed.

· **NTP (National Toxicology Program)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** *No further relevant information available.*

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**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:** *Smaller quantities can be disposed of with household waste.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

**14 Transport information**

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA**                      *Void*
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA**                      *Void*
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class**    *Void*
- **Packing group**
- **DOT, ADR, IMDG, IATA**                              *Void*
- **Environmental hazards:**
- **Marine pollutant:**    *No*
- **Special precautions for user**                              *Not applicable.*
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**                      *Not applicable.*
- **Transport/Additional information:**
- **DOT**
- **Hazardous substance:**    *5000 lbs, 2270 kg*
- **UN "Model Regulation":**    *Non regulated according to above specifications.*
- **UN "Model Regulation":**    *Void*

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**  
*Substance is not listed.*

· **Section 313 (Specific toxic chemical listings):**  
*Substance is listed.*

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- **TSCA (Toxic Substances Control Act):**  
All ingredients are listed.

|           |        |
|-----------|--------|
| 7440-50-8 | copper |
|-----------|--------|

- **Proposition 65**

|   |
|---|
| · <b>Chemicals known to cause cancer:</b> |
| Substance is not listed.                  |

|  |
|--|
| · <b>Chemicals known to cause reproductive toxicity for females:</b> |
| Substance is not listed.   |

|  |
|--|
| · <b>Chemicals known to cause reproductive toxicity for males:</b> |
| Substance is not listed.   |

|   |
|---|
| · <b>Chemicals known to cause developmental toxicity:</b> |
| Substance is not listed.                                  |

- **Carcinogenicity categories**

|  |
|--|
| · <b>EPA (Environmental Protection Agency)</b> |
| D  |

|   |
|---|
| · <b>TLV (Threshold Limit Value established by ACGIH)</b> |
| Substance is not listed.                                  |

|   |
|---|
| · <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b> |
| Substance is not listed.  |

- **National regulations:**

- **Information about limitation of use:**

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

- **Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

**Disclaimer**

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer shall not be held liable for any damage resulting from handling or from contact with the product.

- **Department issuing SDS:** Environmental, Health and Safety

- **Contact:**

Within the USA: 1-(800)-762-4000

Outside the USA: 1-(203)-712-8488

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

**\* Data compared to the previous version altered.**

USA