SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. Product identifier | |
|--|---|
| Trade name or designation of the mixture | MT-COPPER |
| Registration number | - |
| Synonyms | None. |
| Issue date | 05-March-2019 |
| Version number | 01 |
| 1.2. Relevant identified uses of the | he substance or mixture and uses advised against |
| Identified uses | 3D printer filament |
| Uses advised against | None known. |
| 1.3. Details of the supplier of the | safety data sheet |
| Supplier | |
| Company name | MCPP Netherlands BV |
| Address | Grasbeemd 19, 5705DE Helmond, The Netherlands |
| Telephone | +31 (0)492 210 210 (Office hours Mo Fr. 8:30 - 17:00) |
| Contact person | Product Compliance |
| e-mail | product.compliance@mcpp-europe.com |
| 1.4. Emergency telephone | +31 (0)30 274 8888, only for the doctor |
| number | |
| | National Poison Information Center Utrecht, The Netherlands |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

| Environmental hazards Hazardous to the aquatic e aquatic hazard | nvironment, acute | Category 1 | | H400 - Very toxic to aquatic life. | |
|---|----------------------|-----------------|----------------------------|---|--|
| Hazardous to the aquatic e long-term aquatic hazard | nvironment, | Category 3 | | H412 - Harmful to aquatic life with long lasting effects. | |
| zard summary | Not classified for h | nealth hazards. | However, occupational expo | sure to the mixture or substance(s) | |

Hazard summary

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Under CLP Regulation (EC) No 1272/2008 and its amendments, labelling is not required for mixtures containing polymers or elastomers but the information appears in the Safety Data Sheet.

may cause adverse health effects.

Not a PBT or vPvB substance or mixture. 2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|-----------------------|------------------------|------------------------|-------------------------------|--------------|-------|
| Copper (encapsulated) | 70 - < 80 | 7440-50-8 231-159-6 | - | 029-019-01-X | |
| Classification: | Aquatic Acute 1;H400(N | /I=1), Aquatic Chroni | c 3;H412 | | |
| Polylactic acid | 10 - < 20 | 9051-89-2 - | - | - | |

Classification:

| Chemical name | % CAS-No. / EC No. REACH Registration No. Index No. Notes | | | | |
|--|---|--|--|--|--|
| barium sulfate | 3 - < 5 7727-43-7 231-784-4 | | | | |
| Classification: - | | | | | |
| Other components below repo levels | ortable 5 - < 10 | | | | |
| List of abbreviations and symbo M: M-factor | Is that may be used above | | | | |
| Composition comments | The full text for all H-statements is displayed in section 16. | | | | |
| SECTION 4: First aid meas | sures | | | | |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. | | | | |
| 4.1. Description of first aid meas | ures | | | | |
| Inhalation | Not likely, due to the form of the product. If exposed to excessive levels of dusts or fumes, remote to fresh air and get medical attention if cough or other symptoms develop. | | | | |
| Skin contact | If burned by contact with hot material, cool molten material adhering to skin as quickly as possib with water, and see a physician for removal of adhering material and treatment of burn. Do not peel polymer from the skin. | | | | |
| Eye contact | Not likely, due to the form of the product. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately. | | | | |
| Ingestion | Not likely, due to the form of the product. | | | | |
| 4.2. Most important symptoms and effects, both acute and delayed | Exposure may cause temporary irritation, redness, or discomfort. | | | | |
| 4.3. Indication of any mmediate medical attention and special treatment needed | Treat symptomatically. | | | | |
| SECTION 5: Firefighting m | leasures | | | | |
| General fire hazards | No unusual fire or explosion hazards noted. | | | | |
| 5.1. Extinguishing media Suitable extinguishing media | Powder. Dry sand. | | | | |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. | | | | |
| 5.2. Special hazards arising from the substance or mixture | During fire, gases hazardous to health may be formed. | | | | |
| 5.3. Advice for firefighters Special protective equipment for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. | | | | |
| Special fire fighting procedures | Move containers from fire area if you can do so without risk. | | | | |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. | | | | |
| SECTION 6: Accidental rel | ease measures | | | | |
| 6.1. Personal precautions, prote | ctive equipment and emergency procedures | | | | |
| For non-emergency personnel | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Loc authorities should be advised if significant spillages cannot be contained. For personal protection see section 8 of the SDS. | | | | |
| For emergency responders | Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. | | | | |
| 6.2. Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. | | | | |
| 6.3. Methods and material for containment and cleaning up | Prevent product from entering drains. Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS. | | | | |
| | | | | | |

SECTION 7: Handling and storage

Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective 7.1. Precautions for safe equipment. Avoid release to the environment. Observe good industrial hygiene practices. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the 7.2. Conditions for safe SDS). storage, including any incompatibilities

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

handling

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBI. II, no. 184/2001

| Components | Туре | Value | Form |
|--|------|-----------|---------------------------|
| Copper (encapsulated) (CAS 7440-50-8) | МАК | 1 mg/m3 | Inhalable fraction. |
| | | 0,1 mg/m3 | Fume and respirable dust. |
| | STEL | 4 mg/m3 | Inhalable fraction. |
| | | 0,4 mg/m3 | Fume and respirable dust. |
| Belgium. Exposure Limit Values. | | | |
| Components | Туре | Value | Form |
| barium sulfate (CAS 7727-43-7) | TWA | 10 mg/m3 | |
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| | | 0,2 mg/m3 | Fume. |

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

| Components | Гуре | Value |
|--|------|-----------|
| barium sulfate (CAS 7727-43-7) | TWA | 10 mg/m3 |
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 0,1 mg/m3 |

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09 Form Value Components Type

| Components | Type | Value | | |
|--|------|------------|------------------|--|
| barium sulfate (CAS 7727-43-7) | MAC | 4 mg/m3 | Respirable dust. | |
| | | 10 mg/m3 | Total dust. | |
| Copper (encapsulated) (CAS 7440-50-8) | MAC | 0,21 mg/m3 | Dust and fume. | |
| | STEL | 2 mg/m3 | Dust and fume. | |

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended. Components Value Form Type

| components | туре | value | Tohin | |
|--|-----------------|-----------|-------|--|
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 0,2 mg/m3 | Fume. | |
| Czech Republic. OELs. Governm | nent Decree 361 | | | |
| Components | Туре | Value | Form | |
| barium sulfate (CAS 7727-43-7) | TWA | 5 mg/m3 | Dust. | |
| Copper (encapsulated) (CAS 7440-50-8) | Ceiling | 2 mg/m3 | Dust. | |
| | | 0,2 mg/m3 | Fume. | |
| | TWA | 1 mg/m3 | Dust. | |
| | | 0,1 mg/m3 | Fume. | |
| | | | | |

| Denmark. Exposure Limit Values Components | Туре | Value | Form |
|--|------|-----------|-------|
| Copper (encapsulated) (CAS 7440-50-8) | TLV | 1 mg/m3 | Dust. |
| | | 0,1 mg/m3 | Fume. |

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

| Components | Туре | Value | Form |
|--|------|------------|------------------------------|
| barium sulfate (CAS 7727-43-7) | TWA | 5 mg/m3 | Respirable dust. |
| | | 10 mg/m3 | Total dust. |
| | | 1 mg/m3 | Dust. |
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 1 mg/m3 | Total dust. |
| | | 0,2 mg/m3 | Respirable dust. |
| Finland. Workplace Exposure Li | mits | | |
| Components | Туре | Value | Form |
| barium sulfate (CAS 7727-43-7) | TWA | 10 mg/m3 | Dust. |
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 0,1 mg/m3 | Respirable dust and/or fume. |
| | | 0,02 mg/m3 | Respirable. |

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

| Components | Туре | Value | Form |
|--|--------------------------|-----------|----------------------|
| barium sulfate (CAS 7727-43-7) | VME | 5 mg/m3 | Respirable fraction. |
| Regulatory status: | Regulatory binding (VRC) | | |
| | | 10 mg/m3 | Inhalable fraction. |
| Regulatory status: | Regulatory binding (VRC) | | |
| Copper (encapsulated) (CAS 7440-50-8) | VLE | 2 mg/m3 | Dust. |
| Regulatory status: | Indicative limit (VL) | | |
| | VME | 1 mg/m3 | Dust. |
| Regulatory status: | Indicative limit (VL) | | |
| | | 0,2 mg/m3 | Fume. |
| Pogulatory status | Indicative limit $(1/L)$ | | |

Regulatory status: Indicative limit (VL)

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

| In the work Area (DFG) | | | |
|--|--|------------|----------------------|
| Components | Туре | Value | Form |
| barium sulfate (CAS 7727-43-7) | TWA | 4 mg/m3 | Inhalable fraction. |
| | | 0,3 mg/m3 | Respirable fraction. |
| Copper (encapsulated) (CAS 7440-50-8) | TWA | 0,01 mg/m3 | Respirable fraction. |
| Germany. TRGS 900, Limit Value | es in the Ambient Air at the Workplace | | |
| Components | Туре | Value | Form |
| barium sulfate (CAS 7727-43-7) | AGW | 10 mg/m3 | Inhalable fraction. |
| | | 1,25 mg/m3 | Respirable fraction. |
| Greece. OELs (Decree No. 90/19 | 99, as amended) | | |
| Components | Туре | Value | Form |
| Copper (encapsulated) (CAS 7440-50-8) | STEL | 2 mg/m3 | Dust. |
| | TWA | 1 mg/m3 | Dust. |
| | | 0,2 mg/m3 | Fume. |
| | | | |

| Components | Chemical Safety of Workplaces Type | Value | Form |
|--|---|--|---|
| arium sulfate (CAS 727-43-7) | TWA | 6 mg/m3 | Respirable dust. |
| , | | 10 mg/m3 | Total inhalable dust |
| Copper (encapsulated) (CAS 7440-50-8) | STEL | 4 mg/m3 | |
| , | | 0,4 mg/m3 | Smoke. |
| | TWA | 1 mg/m3 | |
| | | 0,1 mg/m3 | Smoke. |
| celand. OELs. Regulation 154/19 | 99 on occupational exposure li | mits | |
| Components | Туре | Value | Form |
| Copper (encapsulated) | TWA | 1 mg/m3 | Total dust. |
| CAS 7440-50-8) | | 0,1 mg/m3 | Pospirable dust |
| | | 0,1 119/113 | Respirable dust. |
| reland. Occupational Exposure L Components | ₋imits Type | Value | Form |
| - | TWA | | |
| parium sulfate (CAS 7727-43-7) | IVVA | 2 mg/m3 | Respirable dust. |
| Copper (encapsulated) | STEL | 2 mg/m3 | Dust and mist. |
| CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| | IWA | 0,2 mg/m3 | Fume. |
| | | 0,2 119/113 | rume. |
| taly. Occupational Exposure Lim Components | lits Type | Value | Form |
| parium sulfate (CAS | TWA | 5 mg/m3 | Inhalable fraction. |
| 727-43-7) | | 5 mg/ms | |
| Copper (encapsulated) | TWA | 1 mg/m3 | Dust and mist. |
| CAS 7440-50-8) | | 0,2 mg/m3 | Fume. |
| atvia. OELs. Occupational expo | ouro limit values of chemical ou | | |
| Components | Type | Value | Form |
| | TWA | 2 mg/m3 | |
| parium sulfate (CAS | | | |
| | | | |
| 7727-43-7) | | 2 mg/m3 | Dust. |
| 7727-43-7) Copper (encapsulated) | STEL | 2 mg/m3 1 mg/m3 | Dust. |
| 7727-43-7) Copper (encapsulated) | STEL TWA | - | Dust. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) | TWA | 1 mg/m3 0,5 mg/m3 | Dust. |
| 7727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for | TWA | 1 mg/m3 0,5 mg/m3 | Dust. Form |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS | TWA r Chemical Substances, Genera | 1 mg/m3 0,5 mg/m3 I Requirements | |
| 7727-43-7) Copper (encapsulated) (CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS | TWA r Chemical Substances, Genera Type | 1 mg/m3 0,5 mg/m3 I Requirements Value 5 mg/m3 | Form Respirable fraction. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS | TWA r Chemical Substances, Genera Type | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 | Form Respirable fraction. Inhalable fraction. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) | TWA r Chemical Substances, Genera Type TWA | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) | TWA r Chemical Substances, Genera Type | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 | Form Respirable fraction. Inhalable fraction. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) | TWA r Chemical Substances, Genera Type TWA | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) Copper (encapsulated) CAS 7440-50-8) | TWA r Chemical Substances, Genera Type TWA | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. Inhalable fraction. |
| 2727-43-7) Copper (encapsulated) (CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 7727-43-7) Copper (encapsulated) (CAS 7440-50-8) Netherlands. OELs (binding) | TWA r Chemical Substances, Genera Type TWA | 1 mg/m3 0,5 mg/m3 Il Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. Inhalable fraction. |
| 2727-43-7) Copper (encapsulated) (CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) Copper (encapsulated) (CAS 7440-50-8) Netherlands. OELs (binding) Components Copper (encapsulated) | TWA r Chemical Substances, Genera Type TWA TWA | 1 mg/m3 0,5 mg/m3 1 Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 1 mg/m3 0,2 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. Inhalable fraction. Respirable fraction. |
| 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 2727-43-7) Copper (encapsulated) CAS 7440-50-8) Netherlands. OELs (binding) Components Copper (encapsulated) CAS 7440-50-8) | TWA r Chemical Substances, General Type TWA TWA TWA TWA Type Type TWA | 1 mg/m3 0,5 mg/m3 11 Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 1 mg/m3 0,2 mg/m3 Value 0,1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. Inhalable fraction. Respirable fraction. Form |
| Copper (encapsulated) (CAS 7440-50-8) Lithuania. OELs. Limit Values for Components Darium sulfate (CAS 7727-43-7) Copper (encapsulated) (CAS 7440-50-8) Netherlands. OELs (binding) Components Copper (encapsulated) (CAS 7440-50-8) Norway. Administrative Norms fo Components | TWA r Chemical Substances, General Type TWA TWA TWA TWA Type Type TWA | 1 mg/m3 0,5 mg/m3 11 Requirements Value 5 mg/m3 10 mg/m3 1 mg/m3 1 mg/m3 0,2 mg/m3 Value 0,1 mg/m3 | Form Respirable fraction. Inhalable fraction. Dust. Inhalable fraction. Respirable fraction. Form |

| Norway. Administrative Norms for Conta Components | Type | Value | Form |
|--|--------------------------------------|-----------------------------------|---------------------------|
| | - | 10 mg/m3 | Total dust. |
| Copper (encapsulated) | TLV | 1 mg/m3 | Dust. |
| CÁS 7440-50-8) | | 0,1 mg/m3 | Fume. |
| | | | |
| Ordinance of the Minister of Labour and Intensities of harmful health factors in the section of | | | |
| components | Туре | Value | |
| Copper (encapsulated) CAS 7440-50-8) | TWA | 0,2 mg/m3 | |
| ortugal. VLEs. Norm on occupational e | exposure to chemical agents | (NP 1796) | |
| components | Туре | Value | Form |
| arium sulfate (CAS 727-43-7) | TWA | 5 mg/m3 | Inhalable fraction. |
| Copper (encapsulated) CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| 543 7440-50-6) | | 0,2 mg/m3 | Fume. |
| Romania. OELs. Protection of workers f | rom exposure to chemical ag | gents at the workplace | |
| Components | Туре | Value | Form |
| Copper (encapsulated) CAS 7440-50-8) | STEL | 1,5 mg/m3 | Dust. |
| | | 0,2 mg/m3 | Fume. |
| | TWA | 0,5 mg/m3 | Dust. |
| lovakia. OELs. Regulation No. 300/2007 components | 7 concerning protection of h Type | ealth in work with chemi Value | cal agents Form |
| arium sulfate (CAS | TWA | 4 mg/m3 | Inhalable fraction. |
| 727-43-7) | | r nig/nie | |
| | | 1,5 mg/m3 | Respirable fraction. |
| opper (encapsulated) CAS 7440-50-8) | TWA | 1 mg/m3 | Inhalable fraction. |
| , | | 0,2 mg/m3 | Respirable fume. |
| lovenia. OELs. Regulations concerning | | nst risks due to exposure | to chemicals while workir |
| Official Gazette of the Republic of Slove components | enia) Type | Value | Form |
| Copper (encapsulated) | TWA | | |
| CAS 7440-50-8) | IWA | 1 mg/m3 | Inhalable fraction. |
| | | 0,1 mg/m3 | Respirable fume. |
| pain. Occupational Exposure Limits | | | |
| components | Туре | Value | Form |
| arium sulfate (CAS 727-43-7) | TWA | 10 mg/m3 | |
| Copper (encapsulated) CAS 7440-50-8) | TWA | 1 mg/m3 | Dust and mist. |
| <i>,</i> | | 0,2 mg/m3 | Fume. |
| weden. OELs. Work Environment Auth | ority (AV), Occupational Exp | oosure Limit Values (AFS | 2015:7) |
| components | Туре | Value | Form |
| arium sulfate (CAS 727-43-7) | TWA | 5 mg/m3 | Inhalable dust. |
| - , | | 2,5 mg/m3 | Respirable dust. |
| Copper (encapsulated) CAS 7440-50-8) | TWA | 0,01 mg/m3 | Respirable dust. |
| | itsplatz | | |
| WITZERIANO, SUVA Grenzwerte am Arne | | | |
| Switzerland. SUVA Grenzwerte am Arbe Components | Туре | Value | Form |

| Switzerland. SUVA Grenzwerte am Arbeits | splatz |
|---|--------|
| Components | Туре |

| Switzerland. SUVA Grenzv Components | verte am Arbeitsplatz Type | Value | Form |
|---|---|---|---|
| | | 10 mg/m3 | Inhalable dust. |
| Copper (encapsulated) (CAS 7440-50-8) | STEL | 0,2 mg/m3 | Inhalable fraction. |
| | TWA | 0,1 mg/m3 | Inhalable fraction. |
| UK. EH40 Workplace Expo | | | _ |
| Components | Туре | Value | Form |
| barium sulfate (CAS 7727-43-7) | TWA | 4 mg/m3 | Respirable dust. |
| | | 10 mg/m3 | Inhalable dust. |
| Copper (encapsulated) (CAS 7440-50-8) | STEL | 2 mg/m3 | Inhalable dusts and mists. |
| | TWA | 1 mg/m3 | Inhalable dusts and mists. |
| | | 0,2 mg/m3 | Fume. |
| Biological limit values | No biological exposure limits noted for the | e ingredient(s). | |
| Recommended monitoring procedures | Follow standard monitoring procedures. | | |
| Derived no effect levels (DNELs) | Not available. | | |
| Predicted no effect concentrations (PNECs) | Not available. | | |
| 8.2. Exposure controls | | | |
| Appropriate engineering controls | Good general ventilation should be used. applicable, use process enclosures, local maintain airborne levels below recommen established, maintain airborne levels to an | exhaust ventilation, or othe ded exposure limits. If exp | er engineering controls to |
| Individual protection measures | s, such as personal protective equipment | | |
| General information | Personal protection equipment should be discussion with the supplier of the person | | EN standards and in |
| Eye/face protection | Wear safety glasses with side shields (or | goggles). | |
| Skin protection | | | |
| - Hand protection | Wear appropriate chemical resistant glove | es. | |
| - Other | Wear suitable protective clothing. | | |
| Respiratory protection | In case of insufficient ventilation, wear sui | table respiratory equipmer | ıt. |
| Thermal hazards | Wear appropriate thermal protective cloth | ing, when necessary. | |
| Hygiene measures | | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. | |
| Environmental exposure controls | Inform appropriate managerial or supervis general ventilation should be used. Ventil applicable, use process enclosures, local maintain airborne levels below recommen established, maintain airborne levels to a | ation rates should be match exhaust ventilation, or othe ded exposure limits. If exp | hed to conditions. If er engineering controls to |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | |
|---|-----------------------------|
| Physical state | Solid. |
| Form | filament |
| Colour | Copper |
| Odour | Metallic. |
| Odour threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 150 - 170 °C (302 - 338 °F) |

| Flash point | Not available. |
|--|---|
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or exp | losive limits |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | > 1 mg/l (25°C) |
| Solubility(ies) | |
| Solubility (water) | Insoluble |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not explosive. |
| Oxidising properties | Not oxidising. |
| 9.2. Other information | No relevant additional information available. |
| | |

SECTION 10: Stability and reactivity

| 10.1. Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
|---|---|
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. |
| 10.5. Incompatible materials | Strong oxidising agents. |
| 10.6. Hazardous decomposition products | No hazardous decomposition products are known. |

SECTION 11: Toxicological information

| General information | Occupational exposure to the substance or mixture may cause adverse effects. |
|---|---|
| Information on likely routes of e | exposure |
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Based on available data, the classification criteria are not met. |
| Eye contact | Based on available data, the classification criteria are not met. |
| Ingestion | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |
| Symptoms | Exposure may cause temporary irritation, redness, or discomfort. |
| 11.1. Information on toxicologic | cal effects |
| Acute toxicity | Not known. |
| Skin corrosion/irritation | Based on available data, the classification criteria are not met. |
| Serious eye damage/eye irritation | Based on available data, the classification criteria are not met. |
| Respiratory sensitisation | Based on available data, the classification criteria are not met. |
| Skin sensitisation | Based on available data, the classification criteria are not met. |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met. |
| Carcinogenicity | Based on available data, the classification criteria are not met. |
| Hungary. 26/2000 EüM Ordi (as amended) | nance on protection against and preventing risk relating to exposure to carcinogens at work |
| Not listed. | |
| Reproductive toxicity | Based on available data, the classification criteria are not met. |
| Specific target organ toxicity - single exposure | Based on available data, the classification criteria are not met. |
| Material name: MT COPPER | 950 FL |

| Specific target organ toxicity - repeated exposure | Based on available data, the classification criteria are not met. |
|--|---|
| Aspiration hazard | Based on available data, the classification criteria are not met. |
| Mixture versus substance information | No information available. |
| Other information | Not available. |

SECTION 12: Ecological information

| 12.1. Toxicity | Components of this product are hazardous to aquatic life. | | | |
|--|---|---|---|-----------------------|
| Components | | Species | | Test Results |
| Copper (encapsulated) (CAS 744 | 0-50-8) | | | |
| Aquatic | | | | |
| Crustacea | EC50 | Water flea (Da | iphnia magna) | 0,0318 mg/l, 48 hours |
| Fish | LC50 | Chinook salmo tshawytscha) | on (Oncorhynchus | 0,02 mg/l, 96 hours |
| 12.2. Persistence and degradability | No data is | No data is available on the degradability of any ingredients in the mixture. | | |
| 12.3. Bioaccumulative potential | No data av | ailable. | | |
| Partition coefficient n-octanol/water (log Kow) | Not availab | le. | | |
| Bioconcentration factor (BCF) | Not availab | Not available. | | |
| 12.4. Mobility in soil | No data av | No data available. | | |
| 12.5. Results of PBT and vPvB assessment | Not a PBT | or vPvB substance | or mixture. | |
| 12.6. Other adverse effects | | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. | | |
| 12.7. Additional information | | | | |
| Estonia Dangerous substa | nces in grou | dwater Data | | |
| Copper (encapsulated) (CAS 7440-50-8) | | Copper (Cu) 1000 ug/l Copper (Cu) 15 ug/l | | |
| Estonia Dangerous substa | nces in soil D | ata | | |
| Copper (encapsulated) (| CAS 7440-50 | ·8) | Copper (Cu) 100 mg/ Copper (Cu) 150 mg/ Copper (Cu) 500 mg/ | /kg |

SECTION 13: Disposal considerations

| 13.1. Waste treatment methods | |
|-------------------------------|--|
| Residual waste | Dispose of in accordance with local regulations. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| EU waste code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Disposal methods/information | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Special precautions | Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

ΙΑΤΑ

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

SECTION 15: Regulatory information

| 15.1. Safety, health and enviro | nmental regulations/legislation specific for the substance or mixture |
|--|---|
| EU regulations | |
| Regulation (EC) No. 1005/ | 2009 on substances that deplete the ozone layer, Annex I and II, as amended |
| Not listed. | |
| • • • • | 004 On persistent organic pollutants, Annex I as amended |
| Not listed. | |
| Regulation (EU) No. 649/2 Not listed. | 012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended |
| Regulation (EU) No. 649/2 | 012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended |
| Not listed. | |
| • | 012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended |
| Not listed. | 012 concerning the export and import of dangerous chemicals, Annex V as amended |
| • | or z concerning the export and import of dangerous chemicals, Annex v as amended |
| Not listed. Regulation (EC) No. 166/2 | 006 Annex II Pollutant Release and Transfer Registry, as amended |
| Not listed. | obo Annox in Fondant Release and Transfer Registry, as amenaca |
| | 2006, REACH Article 59(10) Candidate List as currently published by ECHA |
| Not listed. | |
| Authorisations | |
| | 2006, REACH Annex XIV Substances subject to authorization, as amended |
| Not listed. | ,,,,,,, |
| Restrictions on use | |
| Regulation (EC) No. 1907/ | 2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended |
| Not listed. | |
| Directive 2004/37/EC: on t | he protection of workers from the risks related to exposure to carcinogens and mutagens at |
| work, as amended. | |
| Not listed. | |
| Other EU regulations | |
| Directive 2012/18/EU on m | ajor accident hazards involving dangerous substances, as amended |
| Not listed. | |
| Other regulations | The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. |
| National regulations | Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended. |
| 15.2. Chemical safety assessment | No Chemical Safety Assessment has been carried out. |
| SECTION 16: Other infor | mation |
| List of abbreviations | Not available. |
| | |

| References | Not available. |
|---|---|
| Information on evaluation method leading to the classification of mixture | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. |
| Full text of any H-statements not written out in full under | |
| Sections 2 to 15 | H400 Very toxic to aquatic life. |
| | H412 Harmful to aquatic life with long lasting effects. |
| Revision information | None. |
| Training information | Follow training instructions when handling this material. |
| Disclaimer | This safety data sheet (SDS) is issued based on the latest reference, data etc currently available. The information in this SDS has been carefully assessed, but no guarantee is given for its accuracy. We cannot anticipate all conditions under which this product may be used. It is the user's responsibility to take appropriate safety measures for handling. |