EU safety data sheet

Trade name: Hovadur® CNCS Pulver

Current version: 2.0.0, issued: 22.02.2021
Replaced version: 1.0.1, issued: 02.10.2019
Region: GB

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

1.1 Product identifier
   Trade name
   Hovadur® CNCS Pulver

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses of the substance or mixture
   Additive Manufacturing
   Uses advised against
   No data available.

1.3 Details of the supplier of the safety data sheet
   Address
   SCHMELZMETALL DEUTSCHLAND GmbH
   Raiffeisenstraße 8
   97854 Steinfeld-Hausen
   Telephone no. +49 9359 9740-0
   e-mail sales@schmelzmetall.com
   Advice on Safety Data Sheet
   sdb_info@umco.de

1.4 Emergency telephone number
   For medical advice (in German and English):
   +49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
   Aquatic Acute 1; H400
   Aquatic Chronic 3; H412
   Carc. 2; H351
   Skin Sens. 1; H317
   STOT RE 2; H373
   Classification information
   This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
   Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
   Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

   Hazard pictograms
   GHS07  GHS08  GHS09

   Signal word
   Warning

   Hazardous component(s) to be indicated on label:
   nickel powder; [particle diameter < 1 mm]
   Hazard statement(s)
Trade name: Hovadur® CNCS Pulver

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SECTION 3: Composition/information on ingredients

3.1 Substances  
Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

<table>
<thead>
<tr>
<th>No</th>
<th>Substance name</th>
<th>CAS / EC / Index / REACH no.</th>
<th>Classification (EC) 1272/2008 (CLP)</th>
<th>Concentration</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>copper</td>
<td>7440-50-8 231-159-6</td>
<td>Aquatic Acute 1; H400 Aquatic Chronic 3; H412</td>
<td>&lt; 100.00</td>
<td>wt%</td>
</tr>
<tr>
<td>2</td>
<td>nickel powder; [particle diameter &lt; 1 mm]</td>
<td>7440-02-0 231-111-4 028-002-01-4</td>
<td>Aquatic Chronic 3; H412 Carc. 2; H351 Skin Sens. 1; H317 STOT RE 1; H372*</td>
<td>&lt; 5.00</td>
<td>wt%</td>
</tr>
</tbody>
</table>

Full Text for all H-phrases and EUH-phrases: pls. see section 16
(*,**,***,***) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. If the patient is likely to become unconscious, place and transport in stable sideways position. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. Call a doctor immediately. If breathing is irregular or stopped, administer artificial respiration.

After skin contact
In case of contact with skin wash off immediately with copious amounts of water. Consult a doctor if skin irritation persists.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). In case of irritation consult an ophthalmologist.
After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Extinguishing powder; Sand; Metal fire powders

Unsuitable extinguishing media
Water; Foam; Carbon dioxide

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Metal oxides

5.3 Advice for firefighters
Use self-contained breathing apparatus. Wear protective clothing. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Avoid dust formation. Ensure adequate ventilation.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up
Avoid raising dust. Take up mechanically. Send in suitable containers for recovery or disposal.

6.4 Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid the formation and deposition of dust. Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale dust.

Advice on protection against fire and explosion
Dust can form an explosive mixture with air. Keep away from sources of heat and ignition. Avoid formation of dust.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Keep container tightly closed in a cool, well-ventilated place.

**Requirements for storage rooms and vessels**
Always keep in containers of same material as the original. Containers which are opened must be carefully closed and kept upright to prevent leakage.

**Incompatible products**
Substances to be avoided, see section 10.

### 7.3 Specific end use(s)
No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

<table>
<thead>
<tr>
<th>No</th>
<th>Substance name</th>
<th>CAS no.</th>
<th>EC no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>copper</td>
<td>7440-50-8</td>
<td>231-159-6</td>
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<tr>
<td></td>
<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>fume</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>WEL long-term (8-hr TWA reference period)</td>
<td>0.2 mg/m³</td>
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<td></td>
<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Copper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>dusts and mists</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WEL short-term (15 min reference period)</td>
<td>2 mg/m³</td>
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<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td></td>
</tr>
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<td>Nickel &amp; its inorganic compounds (except nickel tetracarbonyl): water soluble nickel compounds (as Ni)</td>
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<td>WEL long-term (8-hr TWA reference period)</td>
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<td>Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)</td>
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<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td>Nickel &amp; water insoluble compounds nickel compounds (as Ni)</td>
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<td>Dust respirable</td>
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<td>List of approved workplace exposure limits (WELs) / EH40</td>
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<td>Dust inhalable</td>
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<tr>
<td></td>
<td>Comments</td>
<td>see Definition 44 &quot;Dust&quot;</td>
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</tr>
</tbody>
</table>

### 8.2 Exposure controls

**Appropriate engineering controls**
Ensure adequate ventilation, local exhaust at the work station if necessary.

**Personal protective equipment**

**Respiratory protection**
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Respiratory filter (part): P3

**Eye / face protection**
Tightly fitting safety glasses (EN 166).

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer’s instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>State of aggregation</th>
<th>solid</th>
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<tbody>
<tr>
<td>Form/Colour</td>
<td>Powder</td>
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<tr>
<td></td>
<td>copper colours</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
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<tr>
<td>pH value</td>
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<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
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<tr>
<td>Melting point/freezing point</td>
<td>Value</td>
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<td>Decomposition temperature</td>
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<tr>
<td>Flash point</td>
<td>No data available</td>
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<tr>
<td>Ignition temperature</td>
<td>No data available</td>
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<tr>
<td>Flammability</td>
<td>The product is non-flammable. Method</td>
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<td></td>
<td>Source</td>
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<td>Lower explosion limit</td>
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</tr>
<tr>
<td>Upper explosion limit</td>
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</tr>
<tr>
<td>Vapour pressure</td>
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<tr>
<td>Relative vapour density</td>
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<tr>
<td>Relative density</td>
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<tr>
<td>Density</td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Avoid formation of dust.

10.5 Incompatible materials
Acids; Bases; Oxidizing agents

10.6 Hazardous decomposition products
No data available.

### SECTION 11: Toxicological information

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

Acute oral toxicity
No data available

Acute dermal toxicity
No data available

Acute inhalational toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Reproduction toxicity
No data available
11.2 Information on other hazards

   Endocrine disrupting properties
   No data available.

   Other information
   No data available.

SECTION 12: Ecological information

12.1 Toxicity

   Toxicity to fish (acute)
   No data available

   Toxicity to fish (chronic)
   No data available

   Toxicity to Daphnia (acute)
   No data available

   Toxicity to Daphnia (chronic)
   No data available

   Toxicity to algae (acute)
   No data available

   Toxicity to algae (chronic)
   No data available

   Bacteria toxicity
   No data available

12.2 Persistence and degradability
   No data available.

12.3 Bioaccumulative potential
   No data available.

12.4 Mobility in soil
   No data available.

12.5 Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Results of PBT and vPvB assessment</th>
<th>The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT assessment</td>
<td>The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).</td>
</tr>
<tr>
<td>vPvB assessment</td>
<td></td>
</tr>
</tbody>
</table>

12.6 Endocrine disrupting properties
   No data available.

12.7 Other adverse effects
   No data available.
12.8 Other information

Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class 9
Classification code M7
Packing group III
Hazard identification no. 90
UN number UN3077
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Technical name copper
Tunnel restriction code -
Label 9
Environmentally hazardous substance mark Symbol "fish and tree"

14.2 Transport IMDG

Class 9
Packing group III
UN number UN3077
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Technical name copper
EmS F-A, S-F
Label 9
Marine pollutant mark Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class 9
Packing group III
UN number UN3077
Proper shipping name Environmentally hazardous substance, solid, n.o.s.
Technical name copper
Label 9
Environmentally hazardous substance mark Symbol "fish and tree"

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

<table>
<thead>
<tr>
<th>No</th>
<th>Substance name</th>
<th>CAS no.</th>
<th>EC no.</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nickel powder; [particle diameter &lt; 1 mm]</td>
<td>7440-02-0</td>
<td>231-111-4</td>
<td>27, 27</td>
</tr>
</tbody>
</table>

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
This product is subject to Part I of Annex I, risk category: E1

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Creation of the safety data sheet
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Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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