

Material Safety Data Sheet

Accordance with the Regulation (EU)

1907 / 2006

(REACH)

Revision:02

Revision Date: 2024-08-22

Print Date : 2019-01-17



SECTION 1: Identification of the substance/preparation and of the company

1.1. Trade Name : Ceraplust S

Product Description : Nickel-based alloy; dental continuous casting or other casting process

Product Form: Rod, disc, cylinder or varying geometries.

Purpose: The production of crowns, bridges and dentures in dentistry.

1.2. Details of the supplier of the safety data sheet

Company Name: President Dental GmbH

Street: Kesselbodenstrasse 5,

Zip-Code / Town: 85391 , Allershausen, Germany

Web: www.presidentdental.com



Phone / Fax / E-Mail: +49 8166 3899820 / +49 8166 3899821 / info@presidentdental.com

Manufacturer : Adentatec GmbH- Konrad-Adenauer-Straße 13 , 50996 , Köln/Germany

1.3. Emergency Telephone Number

+49 8166 3899820 (8.00 am – 4.30 pm Mon-Fri)

SECTION 2: Hazards identification

| | |
|---|--|
| 2.1 Description of the risk: | not applicable - see section 2.2 |
| Information concerning particular hazards for humans and for the environment: | This product needs not be labelled due to the calculation procedure of the "EC General Classification Directive for Preparations" in its latest valid version. |
| Users: | Qualified professionals (dental technicians, dentists) |
| Classification system: | The classification complies with the latest EU lists, but there are additional data from specialized literature and from the company. |
| 2.2 GHS label elements: | The following identification is not applicable for the product, but only for vapour, fume and dust that might be formed during its use. |
|  Warning | H351 Suspected of causing cancer. H317 May cause an allergic skin reaction. |
|  Danger | Pursuant to the 1st ATP of the CLP regulation (EC) 1272/2008, Nickel is also classified in category 3.9/1. However, this only applies to Nickel in inhalable form. According to Annex 1, chapter 1.3.4 of the CLP Regulation (EC) 1272/2008, Nickel being a compact metal is not classified in category 3.9/1. |

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2.3 Other hazards during treatment and processing of the alloy:

Additional information:

For vapour, fume and dust created during the processing, the following also applies:

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

Nickel chromium alloy

Chemical characterization:

| | Rest | Cas-Nr./EINECS-Nr./EG-Nr. |
|---------------|-----------|-------------------------------------|
| Nickel Ni | 20 – 70 % | CAS: 7440-02-0 EINECS: 231-111-4 |
| Chromium Cr | 17 – 28 % | CAS: 7440-47-3 EINECS: 231-157-5 |
| Molybdenum Mo | 4 – 14 % | CAS: 7439-98-7 EINECS: 231-107-2 |
| Silicon Si | 0 – 3 % | CAS: 7440-21-3 EINECS: 231-130-8 |

SECTION 4: First aid measures

4.1. Description of first aid measures

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| 4.1 Description of the first aid measures | No specific action required |
| 4.2 Most important acute and delayed symptoms and effects: | |
| After inhalation: | Rinse out mouth and give plenty of water to drink. Seek medical advice in case of persistent discomfort. |
| After skin contact: | Wash with soap and water |
| After eye contact: | Rinse eye under running water and seek medical advice |
| 4.3 Information for medical urgent care or a specialized treatment | In case of any of the above discomfort, consult an internist or ophthalmologist; follow-up examination according to BG principles: |

SECTION 5: Firefighting Measures

5.1. Extinguishing Agent

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Use firefighting measures that suit the environment.
ABC dry powder, foam or sand. **NO WATER!**

5.2. Special hazards emitted by the substance or composite

Metal vapours and metal oxides in the form of smoke and gas.

5.3. Advice for firefighters

Only use the extinguishing agents specified under 5.1. Avoid inhalation of fumes!

SECTION 6: Accidental release measures

6.1. Personal Precautions, protective equipment and emergency procedures.

In case of exposure to fumes or dust: Extractors at the workplace. If there is no extractor, use respiratory protection. Ensure adequate ventilation.

6.2 Environmental precautions

Dispose of any rests / dental scrap in an environmentally sound manner. Swarf must not enter drainage system, surface or ground water.

6.3. Methods and material for containment and cleaning up

Absorb swarf dust mechanically or by means of aspirators fill in suitable recipients for disposal; avoid raising dust. Do not use compressed air, do not blow off.

6.4. Reference to other sections:

See sections 4 and following.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation/extraction at workplace. Avoid dust formation. During thermal or chipping processing, extractors are required on the processing machines.

7.2. Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Take off contaminated clothing immediately. Avoid contact with skin and eyes.

Advice on storage compatibility:

Not required

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Further information on storage conditions:

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| None |
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Storage class:

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|-------|
| CI 13 |
|-------|

Classification according to the operational safety regulation:

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| not applicable |
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7.3. Specific end use(s):

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| Ensure traceability of lots. |
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SECTION 8: Exposure controls/personal protection

8.1. Control Parameters

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| Particulate matter threshold in accordance with Technical Rule for Hazardous Substances 900 ["Technische Regeln für Gefahrstoffe – TRGS 900"] |
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8.2. Exposure controls:

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|--------------------------------|---|
| | 7440 – 02 - 0 Nickel MAK 0.5 mg/m ³ 7440 – 47 - 3 Chromium MAK 0.5 E mg/m ³ AGW 2 E mg/m ³ (1 (I); 10, EU) IOELV (EU) 2 mg/m ³ as Cr Please observe the general particulate matter threshold limits according to TRGS 900. |
| Personal protective equipment: | Wear safety shoes. Respiratory protection: Use suitable breathing apparatus if there is inadequate ventilation. Protective gloves: In splash contact, protection index 2 is recommended, corresponding to more than 30 min. permeation time in accordance to EN 374. Minimum layer thickness / gloves = 0.4 mm In case of a longer and more frequent contact, protection index 6 is recommended, corresponding to more than 480 min. permeation time in |

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| | accordance to EN 374. Minimum layer thickness / gloves = 0.7 mm Material of gloves: <ul style="list-style-type: none">- Butyl rubber- Fluorinated rubber (Viton)- Nitrile-butadiene rubber- Natural rubber (latex)- Chloroprene rubber |
| General protective and hygienic measures: | Consult the protective glove manufacturer for the exact breakthrough time which has to be observed. Eye protection: Protective goggles (DIN EN 175, DIN EN 166) Body protection: Light protective equipment Do not eat, drink or smoke during use. Wash hands before breaks and after finishing work. Avoid contact with eyes and skin. Do not inhale dust, smoke or fumes. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

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| Tensile strength: | ~530 - ~560 MPa |
| Hardness: | ~160 - ~290 HV 10 |
| Fracture strain: | >3 - ~30 % |
| Tensile module: | ~115 GPa |
| Density: | 8.2 - 8.5 g/m ³ |
| Thermal expansion coefficient: | ~14 - ~16(x10 ⁻⁶ K ⁻¹) |
| Melting point: | ~1310 to ~1400°C |
| Risk of explosion: | The Product is not explosive. |
| pH value: | not applicable |
| Other information: | |
| Form: | Rod, disc, cylinder or varying geometries |
| Colour product-specific: | Metallic grey |
| Odour: | Odourless |
| Solubility in / miscibility with water: | insoluble |
| Flammability: | non-inflammable |

SECTION 10: Stability and reactivity

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10.1. Reactivity:

not applicable

10.2. Chemical stability:

not applicable

10.3. Possibility of hazardous reactions:

not applicable

10.4. Conditions to avoid:

not applicable

10.5 Incompatible materials:

not applicable

10.6 Hazardous decomposition products:

no hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

The product does not trigger toxic reactions and is not allergenic. Inhalation of dust may result in respiratory irritation. Irritation of the eyes and skin are possible through direct contact with the dust.

SECTION 12: Ecological information

12.1. Toxicity :

No results known from animal testing.

12.2. Persistence and degradability :

not applicable

12.3. Bioaccumulative potential:

not known

12.4 Mobility in soil:

not applicable

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12.5 Results of the PBT and vPvB assessment:

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|-----------|
| not known |
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12.6 Other adverse effects:

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| not known |
| The product is not subject to classification according to the calculation method of the General Classification guideline for preparations of the European Community in the last version. |

SECTION 13: Disposal Considerations

13.1. Waste treatment methods:

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| <p>The disposal of the product does not entail any hazards; however, the waste must be disposed of according to national or regional regulations.</p> <p>Recommendation: Contact waste material market (alloy) regarding recycling</p> <p>European Waste Catalogue 06 03 15:</p> <ul style="list-style-type: none">- Waste created during grinding 12 01 01- Ferrous metal filings and turnings <p>Uncleaned packages: Recommendation: Packages that cannot be cleaned are to be disposed of in the same way as the substance.</p> <p>Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.</p> |
|---|

SECTION 14: Transport information

14.1 UN number: -

14.2 UN proper shipping name: not applicable

14.3 Transport hazard class: Dental alloys are not a dangerous good under transport regulations:

- Ground transport ADR/RID/ADN and GGVS/GGVE (crossborder/domestic)
- Maritime transport IMDG/GGV sea
- Air transport ICAO-TI and IATA-DGR

14.4 Packing group: not applicable

14.5 Environmental hazards: See section 13

14.6 Special precautions for user: no specific precaution required

14.7 Transport in bulk according to Annex II of MARPOL73/78 Convention and the IBC code: see section 14.3

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SECTION 15: Regulation information

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

Safety, health and environmental regulations/legislation specific for the substance or mixture:

(BetrSichV):

not applicable

Code letter(s) and hazard description(s) of the product:

not applicable

Hazard-determining components of labelling:

not applicable

15.2. Chemical safety assessment:

Chemical safety assessment:

15.3. Additional hazard advices for human and environment

None

SECTION 16: Other information

The information is based on our present state of knowledge, they do not constitute a guarantee of product properties and do not establish a contractual relationship. However, Adentatec GmbH does not assume any explicit or implicit guarantee or warranty as to the correctness, reliability or completeness of the information. Adentatec GmbH advises any person receiving this information, not to use the product for any other use than the intended use described in section 1.2. The user is responsible for complying with all the necessary legal regulations. The product must be used by qualified and trained dental technicians, who are aware of the correct use and can be held responsible in case of improper use.

| | |
|----------------------------|--|
| Relevant H- and P-phrases: | H317 May cause an allergic skin reaction. H351 Suspected of causing cancer H372 Causes damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P260 Do not breathe dust/fume/gas/mist/vapours/spray P 280 Wear protective gloves/protective clothing/eye protection/ face protection. P285 In case of inadequate ventilation wear respiratory protection P302+P352 IF ON SKIN: Wash with plenty of soap and water. |
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| Abbreviations | ADR: Accord européen sur le transport des marchandises |
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| and definitions | <p>dangereuses par route</p> <p>CAS: Chemical Abstracts Service (division of the American Chemical Society)</p> <p>CLP: Classification Labelling Packaging</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>GHS: Globally Harmonized System</p> <p>H-phrase: Hazard statement</p> <p>IATA: International Air Transport Association</p> <p>IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)</p> <p>ICAO: International Civil Aviation Organization</p> <p>ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)</p> <p>IMDG: International Maritime Code for Dangerous Goods</p> <p>LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>P-phrase: Precautionary statement</p> <p>PBT: Provider Backbone Transport</p> <p>RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)</p> <p>vPvB: very persistent very bioaccumulating</p> |
|-----------------|--|

Additional Information:

| | |
|--------------------------------|---|
| Disclaimer of Liability | <p>Origin: ¹ http://www.baua.de</p> <p>² http://www.arbeitssicherheit.de</p> <p>Some of the information presented and conclusions drawn herein are from sources other than direct test-data on the product itself.</p> <p>The contents and format of this MSDS are in accordance with EEC Commission (EC) No. 1907 / 2006.</p> <p>The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge.</p> <p>For this and other reasons, we do not assume responsibility and expressly disclaim liability</p> |
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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.