

## **SECTION 1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

Product code : KERAMIT NP SOLDER

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

Dental alloys

Only for professional dental technician

Uses advised against

Do not use for purposes other than those listed

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

Nobil Metal Spa

Strada San Rocco, 28 - 14018 Villafranca d'Asti - Italy

tel. +39 0141 933811 fax +39 0141 943840

Email: [contact@nobilmetal.it](mailto:contact@nobilmetal.it) - Sito internet: [www.nobilmetal.it](http://www.nobilmetal.it)

Email tecnico competente: [a.mantovani@nobilmetal.it](mailto:a.mantovani@nobilmetal.it)

### **1.4. Emergency telephone number**

+39 0141 933811 - 8.30-12,30 / 13.30-17.30

## **SECTION 2. Hazards identification**

### **2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS07, GHS08

Hazard Class and Category Code(s):

Skin Sens. 1, Resp. Sens. 1, Aquatic Chronic 4

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H413 - May cause long lasting harmful effects to aquatic life.

The product, if inhaled, can cause respiratory sensitization, and if brought into contact with skin can cause skin sensitization. This product is dangerous to the environment as can be harmful to aquatic life with long lasting effects

### **2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

GHS08 - Danger

Hazard statement Code(s):

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled



H413 - May cause long lasting harmful effects to aquatic life.

Supplemental Hazard statement Code(s):  
not applicable

Precautionary statements:

Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P284 - [In case of inadequate ventilation] wear respiratory protection.

Response

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

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

Contains:

cobalt

### 2.3. Other hazards

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Legislative Decree n. 81 April 9, 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and amount of hazardous chemical agent and the method and frequency of exposure to the agent, you only a "moderate risk" for the health and safety of workers and that the measures envisaged in the same legislative decree are sufficient to reduce the risk.

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrilevant

### 3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

| Substance  | Concentration | Classification  | Index        | CAS       | EINECS    | REACH |
|------------|---------------|---|--------------|-----------|-----------|-------|
| cobalt     | > 50 <= 75%   | Skin Sens. 1, H317;<br>Resp. Sens. 1, H334;<br>Aquatic Chronic 4,<br>H413 | 027-001-00-9 | 7440-48-4 | 231-158-0 |       |
| Chromium   | > 20 <= 30%   |   |              | 7440-47-3 | 231-157-5 |       |
| Molybdenum | > 1 <= 5%     |   |              | 7439-98-7 | 231-107-2 |       |
| Silicon    | > 1 <= 5%     |   |              | 7440-21-3 | 231-130-8 |       |

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin:

Wash thoroughly with soap and running water.

Direct contact with eyes:

Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:

Rinse mouth with water, if you feel unwell seek medical advice.

#### **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**

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

## **SECTION 5. Firefighting measures**

### **5.1. Extinguishing media**

Advised extinguishing agents:

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

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

No data available.

### **5.3. Advice for firefighters**

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

## **SECTION 6. Accidental release measures**

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

6.1.1 For non-emergency personnel:

Wear mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear mask, gloves and protective clothing.

Provision of sufficient ventilation.

### **6.2. Environmental precautions**

Contain spill

Discharge the remains in compliance with the regulations

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

6.3.1 For containment:

Rapidly recover the product, wear a mask and protective clothing  
Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:  
After wiping up, wash with water the area and materials involved

6.3.3 Other information:  
None in particular.

#### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid inhalation of dust. Avoid contact with skin and eyes. Provision of sufficient ventilation.  
At work do not eat or drink.  
See also paragraph 8 below.

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

Keep in original container closed tightly. Do not store in open or unlabeled containers.

### **7.3. Specific end use(s)**

Only for professional dental technician :  
Handle with care. Avoid formation of dust

## **SECTION 8. Exposure controls/personal protection**

### **8.1. Control parameters**

cobalt

TLV: 00:02 mg / m<sup>3</sup> as TWA A3 (confirmed animal carcinogen with unknown relevance to humans); EIB  
published (ACGIH 2004).

MAK: (inhalable fraction) sensitization of respiratory tract and skin (Sah); Carcinogen: Group 2 mutagenic to germ cells:  
3A (DFG 2003).

### **8.2. Exposure controls**

Appropriate engineering controls:  
Only for professional dental technician :  
Nothing to report



Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)

(ii) Other

When handling the pure product wear full protective skin clothing.

(c) Respiratory protection

Use adequate protective respiratory equipment (EN 141)

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

cobalt

Do NOT let this chemical contaminates the environment.

## SECTION 9. Physical and chemical properties

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

| Physical and chemical properties             | Value                 | Determination method |
|--|-----------------------|----------------------|
| Appearance                                   | powder                |                      |
| Odour  | odourless             |                      |
| Odour threshold                              | irrelevant            |                      |
| pH   | irrelevant            |                      |
| Melting point/freezing point                 | 1170-1260°C           |                      |
| Initial boiling point and boiling range      | undefined             |                      |
| Flash point                                  | nonflammable          | ASTM D92             |
| Evaporation rate                             | irrelevant            |                      |
| Flammability (solid, gas)                    | nonflammable          |                      |
| Upper/lower flammability or explosive limits | irrelevant            |                      |
| Vapour pressure                              | irrelevant            |                      |
| Vapour density                               | irrelevant            |                      |
| Relative density                             | 8.3 g/cm <sup>3</sup> |                      |
| Solubility(ies)                              | not soluble           |                      |
| Water solubility                             | not soluble           |                      |
| Partition coefficient: n-octanol/water       | irrelevant            |                      |
| Auto-ignition temperature                    | irrelevant            |                      |
| Decomposition temperature                    | irrelevant            |                      |
| Viscosity                                    | irrelevant            |                      |
| Explosive properties                         | not explosive         |                      |
| Oxidising properties                         | non-oxidizing         |                      |

### 9.2. Other information

No data available.

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

No reactivity hazards

#### **10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

#### **10.3. Possibility of hazardous reactions**

There are no hazardous reactions

#### **10.4. Conditions to avoid**

Nothing to report

#### **10.5. Incompatible materials**

Acids

#### **10.6. Hazardous decomposition products**

Does not decompose when used for intended uses.

### **SECTION 11. Toxicological information**

#### **11.1. Information on toxicological effects**

ATE(mix) oral = ∞

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: based on available data, the classification criteria are not met.

(b) skin corrosion/irritation based on available data, the classification criteria are not met.

(c) serious eye damage/irritation: based on available data, the classification criteria are not met.

(d) respiratory or skin sensitization: The product, if inhaled, can cause respiratory sensitization, and if brought into contact with skin can cause skin sensitization.

(e) germ cell mutagenicity: based on available data, the classification criteria are not met.

(f) carcinogenicity: based on available data, the classification criteria are not met.

(g) reproductive toxicity: based on available data, the classification criteria are not met.

(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

KERAMIT NP SOLDER:

LD50 (rat) Oral (mg/kg body weight) = 6171

cobalt

ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation.

INHALATION RISK: A harmful concentration of airborne particles can be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE: The substance (as fume or dust) and 'mildly irritating to the respiratory tract

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: Repeated or prolonged contact may cause skin sensitization. Repeated or prolonged inhalation exposure may cause asthma. Lungs may be affected by repeated or prolonged. It 'possible that this substance is carcinogenic to man.

ACUTE HAZARDS / SYMPTOMS

Cough. Shortness of breath. Sore throat. Dyspnea. Redness. Ingestion Abdominal pain. Vomiting.

NOTES Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of asthma often do not manifest until a few hours and they are aggravated by physical effort. They are therefore essential the rest and observation by medical. Anyone who has shown symptoms of asthma due to this substance should avoid any further contact. Do NOT take working clothes home.

## SECTION 12. Ecological information

### 12.1. Toxicity

cobalt

The substance is toxic to aquatic organisms. Can there Bioaccumulation of this chemical in fish and mollusc

The product can cause long-term adverse effects in the aquatic environment, being hardly degradable and / or bioaccumulative

Use according to good working practices to avoid pollution into the environment.

### 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

The substance / mixture NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

### 12.6. Other adverse effects

No adverse effects

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.

Recover if possible. Operate according to local or national regulations

## SECTION 14. Transport information

### 14.1. UN number

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

### 14.2. UN proper shipping name

None

**14.3. Transport hazard class(es)**

None

**14.4. Packing group**

None

**14.5. Environmental hazards**

None

**14.6. Special precautions for user**

No data available.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

It is not intended to carry bulk

**SECTION 15. Regulatory information**

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

No data available.

**15.2. Chemical safety assessment**

No chemical safety assessment was carried out by the supplier

**SECTION 16. Other information**

**16.1. Other information**

Description of the hazard statements exposed to point 3

H317 = May cause an allergic skin reaction.

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

H413 = May cause long lasting harmful effects to aquatic life.

Classification based on data of all mixture components

**GENERAL BIBLIOGRAPHY:**

1. Directive 1999/45/EC and subsequent updates
2. Directive 67/548/EEC and subsequent amendments and adjustments
3. Council Regulation (EC) 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) 1272/2008 of the European Parliament (CLP) and subsequent updates
5. Council Regulation (EC) no 758/2013 of the European Parliament
6. Regulation (EC) no 453/2010 of the European Parliament
7. Regulation (EC) No 528/2012 European Parliament and subsequent updates
8. Council Regulation (EC) 648/2004 of the European Parliament and subsequent updates
9. The Merck Index And 10.
10. Handling Chemical Safety
11. Niosh Registry of Toxic Effects of Chemical Substances
12. INRS-Centre Piece
13. Patty-Industrial Hygiene and Toxicology
14. N.I. Sax-Dangerous properties of Industrial Materials-7 Ed., 1989



**Note to the user:**

the information in this tab are based on knowledge available to us on the date of the latest version.

The user must ensure the fitness and completeness of the information in relation to the specific use of the product.

You should not interpret it as a guarantee of any specific property of the product. For the use of the product does not fall under our direct control, the obligation of the user to observe under their own liability laws and regulations on hygiene and safety. Do not assume liability for improper use.

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