

safety data sheet according to 91/155/EEC

version no.: 3

valid from: 22.09.2017

CopraBond K

1. identification of the substance/preparation and of the company/undertaking:

- 1.1 identification of the substance: cobalt chrome
- 1.2 application / preparation: metal disc ca. Ø 98 x 8 – 24,5 mm
for dental use
- 1.3 producer / supplier: Whitepeaks Dental Solutions GmbH & Co. KG
Langeheide 9
45239 Essen - Germany
phone: +49-281-206458-0
fax: +49-281-206458-13
- 1.4 toxication helpdesk: Giftnotrufzentrale Berlin:
phone (24Std.) +49 30 30686 700

2. composition / information on ingredients

chem characterisation: Cr-Co

Ingredients:

CAS: 7440-48-4	EINECS: 231-158-0	cobalt (Co)	59,0% - 63,0%
CAS: 7440-47-3	EINECS: 231-157-5	chrome (cr)	27,0% - 29,0%
CAS: 7440-33-7	EINECS: 231-143-9	wolfram (W)	8,0% - 9,0%
CAS: 7439-98-7	EINECS: 231-107-2	manganese	0,15% - 0,35%
CAS: 7439-89-6	EINECS: 231-096-4	iron	0,0% - 0,5%
CAS: 7440-21-3	EINECS: 231-130-8	silicium	1,5% - 1,8%
CAS: 7440-44-0	EINECS: 215-202-6	carbon	0,0% - 0,1%

additional notes: The hazards in point 4 to 8 as well as 10 to 12 do not refer to the product itself, but to the dust released by processing.

3. hazards identification

- 3.1 hazard designation for human an environment: n.a.
- 3.2 hazardous / non hazardous preparation: n.a.
- 3.3 harmful effects to health and evironment on abuse: n.a.
- 3.4 other hazards based on material: n.a.

4. first aid measures

- | | | |
|-----|----------------------------|--|
| 4.1 | general information: | no special measures are required |
| 4.2 | after inhalation: | consult a physician |
| 4.3 | after skin contact: | n.a. |
| 4.4 | after eye contact: | if swarf get into your eyes, rinse open eye for several minutes under running water. If symptoms persist consult a physician |
| 4.5 | after swallowing: | in case of discomfort consult a physician |
| 4.6 | information for physician: | n.a. |

5. fire-fighting measures

No special measures are required. The product is resistant to fire and explosion. Coordinate measures to the ambience.

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|-----|-----------------------------------|------|
| 5.1 | suitable extinguishing media: | n.a. |
| 5.2 | not suitable extinguishing media: | n.a. |
| 5.3 | hazardous combustion products: | n.a. |
| 5.4 | special protection equipment: | n.a. |

6. accidental release measures

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|-----|----------------------------|---|
| 6.1 | personal precautions: | common use of protective clothing, dust mask as well as a dust extractor device |
| 6.2 | environmental precautions: | no special measures are required |
| 6.3 | methods of cleaning: | absorption, sweep |
| 6.4 | additional information: | n.a. |

7. handling and storage

- | | | |
|-----|--------------|--|
| 7.1 | handling: | according to use instructions. To proper application no special measures required. Take care for sufficient extraction at work station |
| 7.2 | storage: | no special measures required |
| 7.3 | application: | n.a. |

8. exposure controls/personal protection

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|-------|--|---|
| 8.1 | exposure limits: | n.a. |
| 8.2 | limitation and monitoring to exposure | n.a. |
| 8.2.1 | limitation and monitoring to exposure at work station: | fine dust MAK 6 mg/m ³
1317-35-7 manganese oxide
MAK 1 mg/m ³ |

7440-48-4 cobalt (2, 3,25; TRGS 901-12)

MAK 0,1 E mg/m³

Do not eat, drink or smoke while you are working. Keep away from food and drinks

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|---------|--|--------------------------|
| 8.2.1.1 | respiratory protection: | use a dust mask |
| 8.2.1.2 | hand protection | wear protective gloves |
| 8.2.1.3 | eye protection: | use protective glasses |
| 8.2.1.4 | skin protection: | wear protective clothing |
| 8.2.2 | limitation and monitoring to environmental exposure: | n.a. |

9. physical and chemical properties

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|--------|------------------------|---|
| 9.1 | appearance: | silver |
| 9.1.1 | aggregate state: | solid |
| 9.1.2 | odour: | odourless |
| 9.2 | pH | n.a. |
| 9.2.1 | boiling point: | n.a. |
| 9.2.2 | flash point: | n.a. |
| 9.2.3 | autoflammability: | n.a. |
| 9.2.4 | explosive properties: | this product is not explosive |
| 9.2.5 | oxidizing properties: | n.a. |
| 9.2.6 | vapor pressure: | n.a. |
| 9.2.7 | relative density: | 8,3 gr/cm ³ at 20°C |
| 9.2.8 | solubility water / fat | insoluble in water |
| 9.2.9 | partition eoefficient: | n.a. |
| 9.2.10 | viscosity : | n.a. |
| 9.2.11 | apor densitiy | n.a. |
| 9.2.12 | evaporation rate: | n.a. |
| 9.3 | other data: | melting point at 1320°C to 1420°C, decomposition temperature 2000°C |

10. stability and reactivity

- | | | |
|------|-----------------------------------|------|
| 10.1 | conditions to avoid: | n.a |
| 10.2 | materials to avoid: | n.a. |
| 10.3 | hazardous decomposition products: | n.a. |

11. toxicological information

n.a.

12. ecological information

12.1 ecotoxicity:	not hazardous to water
12.2 mobility:	n.a.
12.3 persistence / degradability:	n.a.
12.4 bioaccumulation potential:	n.a.
12.5 other adverse effects:	n.a.

13. disposal considerations

suggestion:	Contact waste processors for recycling information
europaean waste catalogue:	12 01 04 non-ferrous metal dust and particles

14. transport information

14.1 un-number:	n.a.
14.2 class:	n.a.
14.3 correct identification of goods:	CopraBond K
14.4 packaging group:	n.a.
14.5 ocean harmful substances:	n.a.
14.6 other relevant information:	n.a.

15. regulatory information

subject to classification: This product is not subject to declaration according to EC rules

16. other information

This safety data sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

We can not a guarantee or give a warranty for the accuracy, dependability and completeness of this information, explicitly or implicitly. We call upon any person getting this information to urgently check and verify the adequacy and completeness for her or his special application.

n.a. = not applicable