

safety data sheet according to 91/155/EEC

version no.: 4

valid from: 22.09.2017

Copra Ti

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

- 1.1 identification of the substance: titanium grade 2, grade 4 and grade 5
- 1.2 application / preparation: metal discs ~ 98,3 Ø x 8 – 24,5mm
used to produce crowns and bridges
- 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: Mixture of substances listed below with nonhazardous additions.

Grade 2	Menge	CAS	EINECS
titanium (Ti)	> 99%	7440-32-6	231-142-3
ferrum (FE)	max. 0,30%	7439-89-6	231-096-4
carbon (C)	max. 0,10%	7440-44-0	231-153-3
nitrogen (N)	max. 0,03%	7727-37-9	231-783-9
oxygen (O)	max. 0,25%	7782-44-7	231-956-9
hydrogen (H)	max. 0,0125%	1333-74-0	215-605-7

Grade 4	Menge	CAS	EINECS
titanium (Ti)	>99%	7440-32-6	231-142-3
ferrum (FE)	max. 0,50%	7439-89-6	231-096-4
carbon (C)	max. 0,10%	7440-44-0	231-153-3
nitrogen (N)	max. 0,05%	7727-37-9	231-783-9
oxygen (O)	max. 0,40%	7782-44-7	231-956-9
hydrogen (H)	max. 0,0125%	1333-74-0	215-605-7

Grade 5	Menge	CAS	EINECS
titanium (Ti)	~ 90%	7440-32-6	231-142-3
ferrum (FE)	max. 0,25%	7439-89-6	231-096-4
aluminium (Al)	5,5 – 6,5%	7429-90-5	231-072-3
vanadium (V)	3,5 – 4,5%	7440-62-2	7440-62-2
oxygen (O)	max. 0,13%	7782-44-7	231-956-9
hydrogen (H)	max. 0,012%	1333-74-0	215-605-7
nitrogen (N)	max. 0,05%	7727-37-9	231-783-9
carbon (C)	max. 0,08%	7440-44-0	231-153-3

additional information: 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 environment 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 according to the ambience.

- 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

- | | | |
|-----|----------------------------|--|
| 6.1 | personal precautions: | common use of protective clothing, 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: | the product does not contain any substances subject to safety value monitoring at workstation. Do not eat, drink or smoke while you are working. Keep away from food and drinks |
| 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: | wear 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

9.1	appearance:	silver-grey
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:	~ 4,51 g/cm ³ (Grade 2/4) / ~ 4,43 g/cm ³ (Grade 5)
9.2.8	solubility water / fat	insoluble in water
9.2.9	partition coefficient:	n.a.
9.2.10	viscosity	n.a.
9.2.11	vapor density:	n.a.
9.2.12	evaporation rate:	n.a.
9.3	other data:	melting point at 1668°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

the product does not create any harmful effect to the health if handled correctly and considered the intended use.

12. ecological information

12.1	ecotoxicity:	not hazardous to water
12.2	mobility:	n.a.
12.3	persistence / degradability:	nondegradable
12.4	bioaccumulation potential:	n.a.
12.5	other adverse effects:	none

13. disposal considerations

suggestion: Contact waste processors for recycling information
european 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: titanium grade 2, titanium grade 4, titanium grade 5
14.4 packaging group: n.a.
14.5 ocean harmful substances: n.a.
14.6 other relevant information: none

15. regulatory information

subject to classification: This product is no 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