

# Safety Data Sheet as per regulation (EC) 1907/2006

Commercial Product Name: Ceramill TI-connect / Ceramill TI-connect SR /

Ceramill TI-Forms

Article-No.: 792111-792981

Revision date:

Version: /en

Print date: 26.11.2014



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

### 1.1 Product identifier

Commercial Product Name Ceramill TI-connect / Ceramill TI-connect SR / Ceramill TI-Forms

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

Relevant identified uses Resources for dental technology

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

Company designation Amann Girrbach AG  
Herrschaftswiesen 1  
A-6842 Koblach  
Telephone: 0043 5523 623330  
FAX: 0043 5523 55990  
Email: austria@amanngirrbach.com  
Internet: www.amanngirrbach.com

Marketer Amann Girrbach GmbH  
Duerrenweg 40  
D-75177 Pforzheim  
Telephone: 0049 7231 957100  
FAX: 0049 7231 957129  
Email: germany@amanngirrbach.com  
Internet: www.amanngirrbach.com

### 1.4 Emergency telephone number

Emergency telephone number +49 (0)7231 957100  
Only available during office hours.

## SECTION 2: Hazards identification

Hazardous component(s) to be indicated on label Titan, Aluminiumpulver (nicht stabilisiert), Vanadium, Eisensalze, Sauerstoff, Kohlenstoff C, Nitrogen, Wasserstoff

Health hazard Inhalation of dust may cause irritation of the respiratory system. Causes eye irritation.

## SECTION 3: Composition/information on ingredients

Chemical characterization TiAl6V4, DIN ISO 5832-3:2000-08  
CAS-Nr.: 12743-70-3

### Hazardous ingredients

Ingredient		Classification (EEC) No 67/548	Concentration
		Classification (EC) 1272/2008	
Titan	CAS No.: 7440-32-6 EC-No.: 231-142-3		88.105 - 90.959
Aluminiumpulver (nicht stabilisiert)	CAS No.: 7429-90-5 EC-No.: 231-072-3 Index-No.: 013-001-00-6	F; R15-17F; R15-17F; R15-17F; R15-17F; R15-17F; R15-17 Water-react. 2; H261 Pyr. Sol. 1; H250 Water-react. 2; H261 Pyr. Sol. 1; H250 Water-react. 2; H261 Pyr. Sol. 1; H250 Water-react. 2; H261 Pyr. Sol. 1; H250	5.5 - 6.75
Vanadium	CAS No.: 7440-62-2 EC-No.: 231-171-1		3.5 - 4.5
Eisensalze	CAS No.: 7439-89-6		0.01 - 0.3
Sauerstoff	CAS No.: 7782-44-7	O; R80; R80; R80; R80; R80; R8	0.01 - 0.2

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Ingredient		Classification (EEC) No 67/548	Concentration
		Classification (EC) 1272/2008	
	EC-No.: 231-956-9 Index-No.: 008-001-00-8	Ox. Gas 1; H270 Press. Gas; H270 Ox. Gas 1; H270 Press. Gas; H270 Ox. Gas 1; H270 Press. Gas; H270 Ox. Gas 1; H270 Press. Gas; H270 Ox. Gas 1; H270 Press. Gas; H270	
Kohlenstoff C	CAS No.: 7440-44-0		0.01 - 0.08
Nitrogen	CAS No.: 7727-37-9 EC-No.: 231-783-9		0.01 - 0.05
Wasserstoff	CAS No.: 1333-74-0 EC-No.: 215-605-7 Index-No.: 001-001-00-9	F+; R12F+; R12F+; R12F+; R12F+; R12F+; R12 Flam. Gas 1; H220 Press. Gas; H220 Flam. Gas 1; H220 Press. Gas; H220 Flam. Gas 1; H220 Press. Gas; H220 Flam. Gas 1; H220 Press. Gas; H220 Flam. Gas 1; H220 Press. Gas; H220	0.001 - 0.015

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

If inhaled

Provide fresh air.

In case of eye contact

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

## SECTION 5: Firefighting measures

### 5.3 Advice for firefighters

Additional information on firefighting

No special fire protection measures are necessary.

## SECTION 6: Accidental release measures

### 6.5 Additional information

Other information

No special measures are required.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling

Dust should be exhausted directly at the point of origin.

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

Storage specifications

No special measures are required.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Titan

Poland

Short-term exposure value / mg/m <sup>3</sup>	Long-term exposure value / mg/m <sup>3</sup>	Maximum admissible concentration / mg/m <sup>3</sup>	Source
30	10	-	28

Source: 28 - 28

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## Romania

Long-term exposure value/ mg/m <sup>3</sup>	Short-term exposure value / mg/m <sup>3</sup>	Source
10	15	79

Source: 79 - 79

## Aluminium, pyro powders

### Norway

Value / mg/m <sup>3</sup>	Source
5	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

### USA (ACGIH)

Long-term value	Basis	Source
10 mg/m <sup>3</sup>	Irritation	27
5 mg/m <sup>3</sup>	Lung	27

Source: 27 - ACGIH Threshold Limit Values for Chemical Substances 2008

### Belgium

Long-term exposure value/ mg/m <sup>3</sup>	Remarks	Source
5	as Al	35

Source: 35 - Liste de valeurs limites d'expositions professionnelles aux agents chimiques (11.06.2009)

### Greece

Long-term exposure value/ mg/m <sup>3</sup>	Source
10	80

Source: 80 - 80

## Vanadium

### Norway

Value / mg/m <sup>3</sup>	Note	Source
0,2	dust (berechnet als V)	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

### Austria

Area of validity	Long-term exposure value/ mg/m <sup>3</sup>	Short-term exposure value / mg/m <sup>3</sup>	Duration	Frequency per shift	Source
MAK	0,5 E	1 E	15(Miw)	4x	15

Source: 15 - Stoffliste (MAK-Werte und TRK-Werte 2012)

### Belgium

Long-term exposure value/ mg/m <sup>3</sup>	Remarks	Source
0,05	Alveolengängige Fraktion et fume; as V205	35

Source: 35 - Liste de valeurs limites d'expositions professionnelles aux agents chimiques (11.06.2009)

### Czech Republic

Long-term exposure value/ mg/m <sup>3</sup>	Short-term exposure value / mg/m <sup>3</sup>	Note	Source
0,05	0,15	dust	30

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Source: 30 - 30

## Slovenia

Long-term exposure value/ mg/m <sup>3</sup>	Source
0,5 (I)	77

Source: 77 - 77

## Romania

Long-term exposure value/ mg/m <sup>3</sup>	Short-term exposure value / mg/m <sup>3</sup>	Source
0,05	0,1	79
0,1		79

Source: 79 - 79

## Eisensalze

### Norway

Value / mg/m <sup>3</sup>	Note	Source
1	(berechnet als Fe)	17

Source: 17 - Veiledning om administrative normer for forurensning i arbeidsatmosfære Desember 2011

### Bulgaria

Long-term exposure value/ mg/m <sup>3</sup>	Source
1	81

Source: 81 - 81

## Nitrogen

### Switzerland

Remarks	Source
s. Anhang 1.8.2	26

Source: 26 - Grenzwerte am Arbeitsplatz 2014 (SUVA)

### USA (ACGIH)

Remarks	Long-term value	Basis	Source
Simple Asphyxiant	-	Asphyxiation	27

Source: 27 - ACGIH Threshold Limit Values for Chemical Substances 2008

### Spain

Note	Source
b	22

Source: 22 - Límites de exposición profesional para Agentes Químicos 2013

### Belgium

Note	Source
A	35

Source: 35 - Liste de valeurs limites d'expositions professionnelle aux agents chimiques (11.06.2009)

### Ireland

Remarks	Source
Asphx	32

Source: 32 - Code of Practice for the Safety Health and Welfare at Work (2011)

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## Hydrogen

Switzerland

Remarks	Kritische Toxizität	Source
s. Anhang 1.8.2	Asphyxie	26

Source: 26 - Grenzwerte am Arbeitsplatz 2014 (SUVA)

USA (ACGIH)

Remarks	Long-term value	Basis	Source
Simple Asphyxiant	Simple asphyxiant	Asphyxiation	27

Source: 27 - ACGIH Threshold Limit Values for Chemical Substances 2008

Spain

Note	Source
b	22

Source: 22 - Límites de exposición profesional para Agentes Químicos 2013

Belgium

Note	Source
A	35

Source: 35 - Liste de valeurs limites d'expositions professionnelle aux agents chimiques (11.06.2009)

Ireland

Remarks	Source
Asphx.	32

Source: 32 - Code of Practice for the Safety Health and Welfare at Work (2011)

## 8.2 Exposure controls

Respiratory protection

Dust should be exhausted directly at the point of origin.  
In case of inadequate ventilation wear respiratory protection.

Hand protection

Hand protection: not required.

Eye protection

Tightly sealed safety glasses.

General protective and hygiene measures

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	solid
Colour	metallic grey
Odour	odourless
Density [g/cm <sup>3</sup> ]	4,43 g/cm <sup>3</sup>

### 9.2 Other information

Other data	WAK: 9,3 x 10 <sup>-6</sup> /K
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## SECTION 10: Stability and reactivity

### 10.4 Conditions to avoid

Conditions to avoid	None known until now.
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## **SECTION 11: Toxicological information**

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

### **11.2 Additional information**

Other information (chapter 11.) none

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

### **12.6 Other adverse effects**

Further information on ecology none

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

Disposal considerations Dispose of waste according to applicable legislation.

## **SECTION 14: Transport information**

### **14.8 Additional information**

Other information (chapter 14.) No dangerous good in sense of these transport regulations.

## **SECTION 15: Regulatory information**

## **SECTION 16: Other information**

Relevant R-phrases	R12: Extremely flammable. R15: Contact with water liberates extremely flammable gases. R17: Spontaneously flammable in air. R8: Contact with combustible material may cause fire.
Relevant H-phrases	H220: Extremely flammable gas. H250: Catches fire spontaneously if exposed to air. H261: In contact with water releases flammable gases. H270: May cause or intensify fire; oxidiser.
Wording of the hazard classes	Water-react.: Substance or mixture which in contact with water emits flammable gas Pyr. Sol.: Pyrophoric solid Ox. Gas: Oxidising gas Press. Gas: Gases under pressure Flam. Gas: Flammable gas

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.