

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.12.2023

Version number 11

Revision: 01.12.2023

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

1.1 Product identifier

Trade name **System Ti5-Blank**

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

No further relevant information available.

Application of the substance / the mixture

For the production of dental prostheses in the dental laboratory
Metall alloy for dental technology

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Adentatec GmbH
Konrad-Adenauer-Straße 13
50996 Köln/ GERMANY
Tel.: 0049 221 – 35 96 100
www.adentatec.com

Information: Product Management Tel.: +49 221 3596 100 or by mail: info@adentatec.com

1.4 Emergency telephone number:

Tel.: +49 (0) 221 3596 100, Monday to Friday 8.00 a.m. to 5.00 p.m., in German and English, also contact local poison centres

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not to be classified according to the GB CLP regulation.

2.2 Label elements

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

Hazard pictograms Void

Signal word Void

Hazard statements Void

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Titanium alloy

Dangerous components:

CAS: 7429-90-5	aluminium powder (stabilised)	≥2.5-<10%
EINECS: 231-072-3	Flam. Sol. 1, H228; Water-react. 2, H261	
Index number: 013-002-00-1		

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information No special measures required.

After inhalation : Supply fresh air; consult doctor in case of symptoms.

After skin contact : Wash with water and soap.

After eye contact : Rinse opened eye for 15 minutes under running water. Then consult doctor.

After swallowing :

Rinse out mouth and then drink plenty of water (approx. 500 ml).

In case of persistent symptoms consult doctor.

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- . **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- . **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- . **5.1 Extinguishing media**
- . **Suitable extinguishing agents**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water jet. Fight larger fires with foam.
ABC powder
Sand
- . **For safety reasons unsuitable extinguishing agents** Water.
- . **5.2 Special hazards arising from the substance or mixture**
Fire can cause release of :
Metal vapor and metal oxides as fumes.
- . **5.3 Advice for firefighters**
- . **Protective equipment:** Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid causing dust.
Wear protective clothing.
Ensure adequate ventilation
Use breathing protection against the effects of fumes/dust/aerosol.
- . **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- . **6.3 Methods and material for containment and cleaning up:** Collect mechanically.
- . **6.4 Reference to other sections**
See section 7 for information on safe handling
See section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling**
Prevent formation of dust.
Provide suction extractors if dust is formed.
Ensure good ventilation/exhaustion at the workplace.
Extractors are required on all machines used for thermal processing or metal removal processes.
- . **Information about protection against explosions and fires:** No special measures required.
- . **7.2 Conditions for safe storage, including any incompatibilities**
- . **Storage**
- . **Requirements to be met by storerooms and containers:** Store only in the original container.
- . **Information about storage in one common storage facility:** Not required.
- . **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.
- . **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

7429-90-5 aluminium powder (stabilised)

WEL (Great Britain) Long-term value: 10* 4** mg/m³
*inhalable dust **respirable dust

Ingredients with biological limit values:

CAS No.	Designation of material	%	Type	Value	Unit
	General dust exposure limit, measured as alveolic part		German TRGS 900 (2015)	1,25	mg/m ³

Additional information: The lists that were valid during compilation were used as a basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Wash hands during breaks and at the end of the work.
Do not eat, drink or smoke while working.
Avoid contact with the eyes and skin.
Do not inhale dust / smoke / mist.

Breathing equipment:

Use breathing protection in case of insufficient ventilation.
Short term filter device: ABEK-filter
Filter P3.

Protection of hands:

Protective gloves:
In case of spray contact at least protection index 2 recommended, according to more than 30 min. penetration time (EN 374).
Layer thickness of gloves at least: 0.4 mm
In case of prolonged and intensive contact protection index 6 recommended, according to more than 480 min. penetration time (EN 374).
Layer thickness of gloves at least: 0.7 mm

Material of gloves

Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Natural rubber, NR
Chloroprene rubber, CR
Neoprene gloves

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses (DIN 58211, EN 166)

Body protection: Light weight protective clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Solid
Colour:	Grey

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. Smell:	Odourless
. Odour threshold:	not applicable
. pH-value:	Not applicable. not applicable
. Change in condition	
Melting point/freezing point:	1,650-1,700 °C
Initial boiling point and boiling range:	not applicable
. Flash point:	Not applicable not applicable
. Inflammability (solid, gaseous)	not applicable
. Auto-ignition temperature:	not applicable
. Decomposition temperature:	not determined
. Explosive properties:	Product is not explosive.
. Critical values for explosion:	
Lower:	not applicable
. Dust explosion class:	
Oxidising properties	not applicable
. Steam pressure:	Not applicable. not applicable
. Density at 20 °C	4.4 g/cm ³
. Evaporation rate	not applicable
. Solubility in / Miscibility with Water:	Unsoluble
. Partition coefficient: n-octanol/water:	not applicable
. Viscosity:	
dynamic:	Not applicable. not applicable
kinematic:	Not applicable.
. Solvent content:	
Solids content:	100.0 %
. 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- . 10.1 Reactivity No hazardous reactions when stored and handled according to instructions.
- . 10.2 Chemical stability
- . Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- . 10.3 Possibility of hazardous reactions No dangerous reactions known
- . 10.4 Conditions to avoid No further relevant information available.
- . 10.5 Incompatible materials: No further relevant information available.
- . 10.6 Hazardous decomposition products: Formation of metal vapor when melting

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SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
- . **Acute toxicity** Based on available data, the classification criteria are not met.
- . **Primary irritant effect:**
- . **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- . **Serious eye damage/irritation** Moderate irritation
- . **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- . **Additional toxicological information:**
Inhalation of dust may cause irritation of the respiratory tract.
Irritation of the eyes and skin is possible from direct contact with the dust.
- . **Repeated dose toxicity** No further relevant information available.
- . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** No further relevant information available.
- . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- . **Carcinogenicity** Based on available data, the classification criteria are not met.
- . **Reproductive toxicity** Based on available data, the classification criteria are not met.
- . **STOT-single exposure** Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- . **12.1 Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **12.2 Persistence and degradability** No further relevant information available.
- . **Other information:** Inorganic salts are basically not biodegradable.
- . **12.3 Bioaccumulative potential** Does not accumulate in organisms
- . **12.4 Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Other information:**
No COD, no BOD, no AOX
No VOC (0%) according to EC-directive 1999/13/EC
- . **Additional ecological information:**
- . **General notes:**
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- . **13.1 Waste treatment methods**
- . **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Must be specially treated in adherence to official regulations.
- . **Uncleaned packaging:**
- . **Recommendation:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Sol. 1: Flammable solids – Category 1

Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2

. **Sources:** source ECHA: European Chemicals Agency, <http://echa.europa.eu/>

. * **Data compared to the previous version altered.**
