

**SAFETY DATA SHEET (EC 1907/2006)****WIPTAM-WIRE**

Version: **2.0 / GB**  
Revision date: **03.12.2021**  
Issue date: **28.01.2014**  
replaces version: **1.4**  
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Material no.  
Specification **183074**  
VA-Nr **01906948**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name WIPTAM-WIRE  
REACH Registration No.: if available listed in Chapter. 3

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

Relevant applications identified For dental use only.

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

Company DeguDent GmbH  
Postfach 1364  
D-63403 Hanau  
Telephone +49 (0)6181/59-5576  
Telefax +49 (0)6181/59-5879  
Email address SDB.Degudent-DE@dentsplysirona.com

**1.4. Emergency telephone number**

Emergency information +49 (0)6181/59-50 (This telephone number is available during office hours only.)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Respiratory sensitization	Category 1	H334
Skin Sensitisation	Category 1	H317
Carcinogenicity	Category 1B	H350
Specific Target Organ Toxicity - Repeated exposure	Category 1	H372
Chronic aquatic toxicity	Category 4	H413
Reproductive toxicity	Category 1B	H360F
Germ cell mutagenicity	Category 2	H341

**2.2. Label elements****Labelling as per (EU) 1272/2008****hazard-defining component(s) (GHS)**

- nickel
- cobalt

Hazard pictograms



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Signal word	Danger
Hazard statement	H317 - May cause an allergic skin reaction. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H372 - Causes damage to organs through prolonged or repeated exposure. H341 - Suspected of causing genetic defects. H350 - May cause cancer. H360F - May damage fertility. H413 - May cause long lasting harmful effects to aquatic life.
Precautionary statement	P281 - Use personal protective equipment as required. P273 - Avoid release to the environment. P308 + P313 - IF exposed or concerned: Get medical advice/ attention. P302 + P352 - IF ON SKIN: Wash with plenty of water/ soap.
Precautionary statement: Prevention	P273 - Avoid release to the environment.
Precautionary statement: Reaction	P302 + P352 - IF ON SKIN: Wash with plenty of water/ soap. P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Precautionary statement: Storage	P405 - Store locked up.
Precautionary statement: Disposal	P501 - Dispose of contents/container in accordance with local regulation.

**2.3. Other hazards**

nickel oxide is released during processing., May react forming chromium(VI) compounds when processing thermally., Cobalt vapor will be released while processing., Limited evidence of a carcinogenic effect.

Possible release of metallic vapors when melted., Dusts and vapors: Do not inhale.

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

**SECTION 3: Composition/information on ingredients****3.1. Substances**

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**3.2. Mixtures**

**Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008**

<b>• cobalt</b> 40.0%					
CAS-No.	7440-48-4	EC-No.	231-158-0		
Respiratory sensitization				Category 1	H334
Skin Sensitisation				Category 1	H317
Hazardous to the aquatic environment - Chronic Hazard				Category 4	H413
Germ cell mutagenicity				Category 2	H341
Toxicity to reproduction				Category 1B	H360F
Carcinogenicity				Category 1B	H350
<b>• chromium</b> 20.0%					
CAS-No.	7440-47-3	EC-No.	231-157-5		
<b>• nickel</b> 16.0%					
CAS-No.	7440-02-0	EC-No.	231-111-4		
Carcinogenicity				Category 2	H351
Specific Target Organ Toxicity - Repeated exposure				Category 1	H372

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Skin Sensitisation	Category 1	H317
<b>• iron</b> 14.0%		
CAS-No. 7439-89-6	EC-No. 231-096-4	
<b>• molybdenum</b> 7.3%		
CAS-No. 7439-98-7	EC-No. 231-107-2	
<b>• manganese</b> 2.0%		
CAS-No. 7439-96-5	EC-No. 231-105-1	
<b>• Silicium</b> < 1.0%		
CAS-No. 7440-21-3	EC-No. 215-609-9	

Texts of H phrases, see in Chapter 16

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

Remove to fresh air.  
If symptoms persist, call a physician.

**Skin contact**

Wash off with soap and water.  
In the case of skin irritation or allergic reactions see a physician.

**Eye contact**

Rinse with plenty of water.  
If eye irritation persists, consult a specialist.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.  
Obtain medical attention.

**4.2. Most important symptoms and effects, both acute and delayed****Symptoms**

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable extinguishing media: Special powder against metal fire  
quenching powder  
dry sand  
common salt

Unsuitable extinguishing media: Water  
Carbon dioxide (CO<sub>2</sub>)

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

In the case of fire, the following hazardous smoke fumes may be produced: nickel oxides.

**5.3. Advice for firefighters**

The product itself does not burn.  
Extinction measures are to be adjusted to the specific location.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.  
In the event of fire, wear self-contained breathing apparatus.

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**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid dust formation.  
 Avoid breathing dust.  
 In case of dust being formed, provide for adequate extraction.  
 Ensure suitable suction/aeration at the work place and with operational machinery.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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

Use mechanical handling equipment.  
 Avoid dust formation.  
 Fill into marked, sealable containers.

**6.4. Reference to other sections**

Wear personal protective equipment; see section 8.  
 Disposal considerations; see section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

In case of melting, soldering or grinding:  
 Local ventilation.  
 Avoid dust formation.  
 Dusts and vapors: Do not inhale.  
 In case of dust or vapor: Wear personal safety equipment  
 No special measures are necessary if properly handled.

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

No special storage conditions required.

**German storage class**

13 - Non Combustible Solids

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

We are unaware of any specific end uses which go beyond the data reported in Section 1.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

• cobalt			
CAS-No.	7440-48-4	EC-No.	231-158-0
Control parameters	0.1 mg/m <sup>3</sup>		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	0.02 mg/m <sup>3</sup>		Time Weighted Average (TWA):(NZ OEL)
Control parameters	0.02 mg/m <sup>3</sup>		Time Weighted Average (TWA):
Control parameters	0.02 mg/m <sup>3</sup>		Time Weighted Average (TWA):(KOR OEL)
• chromium			
CAS-No.	7440-47-3	EC-No.	231-157-5
Control parameters	0.5 mg/m <sup>3</sup>		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	2 mg/m <sup>3</sup> Indicative		Time Weighted Average (TWA):(EU ELV)
Control parameters	0.5 mg/m <sup>3</sup>		Time Weighted Average (TWA):(NZ OEL)
Control parameters	0.5 mg/m <sup>3</sup>		Time Weighted Average (TWA):
Control parameters	0.5 mg/m <sup>3</sup>		Time Weighted Average (TWA):(KOR OEL)

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<b>• nickel</b>			
CAS-No.	7440-02-0	EC-No.	231-111-4
Control parameters	0.5 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	Can be absorbed through the skin.		Skin designation:(EH40 WEL)
<b>• molybdenum</b>			
CAS-No.	7439-98-7	EC-No.	231-107-2
Control parameters	20 mg/m3		Short Term Exposure Limit (STEL):(EH40 WEL)
Control parameters	10 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
<b>• manganese</b>			
CAS-No.	7439-96-5	EC-No.	231-105-1
Control parameters	0.5 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
<b>• Silicium</b>			
CAS-No.	7440-21-3	EC-No.	215-609-9
Control parameters	10 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Inhalable dust.		
Control parameters	4 mg/m3		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Respirable dust.		

**8.2. Exposure controls****Engineering measures**

nickel oxide is released during processing., In case of melting, soldering or grinding:, Adequate exhaustion / ventilation of the work site or machinery must be assured. Vacuuming of objects.

**Personal protective equipment****Respiratory protection**

In case of working with / without sufficient object exhaustion:, Respirator with P3 particle filter

**Hand protection**

Protective gloves

Glove material butyl-rubber, Nitrile rubber, Natural Rubber/Natural latex (NR)

**Eye/face protection**

Safety glasses with side-shields, In case of smoke or dust development: goggles

**Skin and body protection**

If nickel oxide fumes occurs: Keep clothes separate. Change contaminated clothing., Apply adequate skin protection agents before handling the product. Assure skin cleaning and skin care after work. Preventive skin protection is recommended.

**Hygiene measures**

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used., Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work., Do not inhale smoke, dust, vapor., If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance**

Form solid  
 Colour white

Odour odourless

Odour threshold: not applicable

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pH	not applicable (solid)
Melting point/range	1450 - 1480 °C
Boiling point/range	not applicable (solid)
Flash point	not applicable
Evaporation rate	No data available
Flammability (solid, gas)	not flammable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	not applicable
Density	8.3 g/cm <sup>3</sup>
Water solubility	insoluble
Partition coefficient: n- octanol/water	no data available
Autoinflammability	Not capable of spontaneous combustion or heating.
Thermal decomposition	No data available
Viscosity, dynamic	no data available
Explosiveness	not applicable
Oxidizing properties	not oxidizing

### 9.2. Other information

Other information No further physicochemical data were determined.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

no data available

### 10.2. Chemical stability

The product is chemically stable.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reactions known.

### 10.4. Conditions to avoid

None known

### 10.5. Incompatible materials

None known

### 10.6. Hazardous decomposition products

Decomposition products occurring when heated above melting temperature  
metallic vapors

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**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute oral toxicity	no data available
Acute inhalation toxicity	no data available
Acute dermal toxicity	no data available
Skin irritation	no data available
Eye irritation	no data available
Sensitization	May cause sensitisation of susceptible persons by skin contact or by inhalation of dust., Allergic reactions caused by ions of cobalt and chromium are known. For none of the cobalt and chromium containing alloys of DeguDent a documented allergic reaction is known.
Repeated dose toxicity	no data available
Mutagenicity assessment	no data available
Carcinogenicity	Test substance: nickel Suspected of causing cancer.
Toxicity to reproduction	No data available
Human experience	Toxic effects from handling this product are unknown as yet.
Further information	No hazardous reactions are known if properly handled and stored.

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**SECTION 12: Ecological information****12.1. Toxicity**

*No ecotoxicological data is available for this product.*

**12.2. Persistence and degradability**

Biodegradability no data available

**12.3. Bioaccumulative potential**

Bioaccumulation no data available

**12.4. Mobility in soil**

Mobility The product is insoluble in water.  
No further information available

**12.5. Results of PBT and vPvB assessment**

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

**12.6. Other adverse effects**

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Further Information

Dusts and water-soluble forms of the alloy:, Introduction into soil, natural water bodies or sewerage must be prevented.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Product**

Disposal according to local authority regulations.

**Uncleaned packaging**

Disposal according to local authority regulations.

**SECTION 14: Transport information**

**Not dangerous according to transport regulations.**

- 14.1. UN number: --  
 14.2. UN proper shipping name: --  
 14.3. Transport hazard class(es): --  
 14.4. Packing group: --  
 14.5. Environmental hazards: --  
 14.6. Special precautions for user: No

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National legislation****15.2. Chemical safety assessment**

Chemical safety assessment No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH Regulation is required for this product.

**SECTION 16: Other information****Classification and applied procedure to derive the classification of mixtures according to EU Regulation (EC) No. 1272/2008 (CLP)**

Classification	Classification procedure
Resp. sens., 1 , H334 Skin Sens., 1 , H317 Carc., 1B , H350 STOT RE, 1 , H372 Aquatic Chronic, 4 , H413 Repr., 1B , H360F Muta., 2 , H341	

**Relevant H phrases from chapter 3**

- H317 : May cause an allergic skin reaction.  
 H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H341 : Suspected of causing genetic defects.  
 H350 : May cause cancer.  
 H351 : Suspected of causing cancer.  
 H360F : May damage fertility.  
 H372 : Causes damage to organs through prolonged or repeated exposure.  
 H413 : May cause long lasting harmful effects to aquatic life.

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**Further information**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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**Legend**

<b>ADR</b>	European Agreement concerning the International Carriage of Dangerous Goods by Road
<b>ADN</b>	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
<b>ASTM</b>	American Society for Testing and Materials
<b>ATP</b>	Adaptation to Technical Progress
<b>BCF</b>	Bioconcentration factor
<b>BetrSichV</b>	German Ordinance on Industrial Safety and Health
<b>c.c.</b>	closed cup
<b>CAS</b>	Chemical Abstract Services
<b>CESIO</b>	European Committee of Organic Surfactants and their Intermediates
<b>ChemG</b>	German Chemicals Act
<b>CMR</b>	carcinogenic-mutagenic-toxic for reproduction
<b>DIN</b>	German Institute for Standardization
<b>DMEL</b>	Derived minimum effect level
<b>DNEL</b>	Derived no effect level
<b>EINECS</b>	European Inventory of Existing Commercial Chemical Substances
<b>EC50</b>	half maximal effective concentration
<b>GefStoffV</b>	German Ordinance on Hazardous Substances
<b>GGVSEB</b>	German ordinance for road, rail and inland waterway transportation of dangerous goods
<b>GGVSee</b>	German ordinance for sea transportation of dangerous goods
<b>GLP</b>	Good Laboratory Practice
<b>GMO</b>	Genetic Modified Organism
<b>IATA</b>	International Air Transport Association
<b>ICAO</b>	International Civil Aviation Organization
<b>IMDG</b>	International Maritime Dangerous Goods
<b>ISO</b>	International Organization For Standardization
<b>LOAEL</b>	Lowest observed adverse effect level
<b>LOEL</b>	Lowest observed effect level
<b>NOAEL</b>	No observed adverse effect level
<b>NOEC</b>	no observed effect concentration
<b>NOEL</b>	no observed effect level
<b>o. c.</b>	open cup
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OEL</b>	Occupational Exposure Limit
<b>PBT</b>	Persistent, bioaccumulative, toxic
<b>PEC</b>	Predicted effect concentration
<b>PNEC</b>	Predicted no effect concentration
<b>REACH</b>	REACH registration
<b>RID</b>	Convention concerning International Carriage by Rail
<b>STOT</b>	Specific Target Organ Toxicity
<b>SVHC</b>	Substances of Very High Concern
<b>TA</b>	Technical Instructions
<b>TPR</b>	Third Party Representative (Art. 4)

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**TRGS** Technical Rules for Hazardous Substances  
**VCI** German chemical industry association  
**vPvB** very persistent, very bioaccumulative  
**VOC** volatile organic compounds  
**VwVwS** German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes  
**WGK** Water Hazard Class  
**WHO** World Health Organization