

Product datasheet Hinge system acc. Herbst

1 Description of the product / intended use / company

Product group:	Telescopes and hinges
Trade name:	Hinge system acc. Herbst
Intended use:	Material for the manufacture of appliances for dental and orthodontic treatment.
Manufacturer / Supplier:	SCHEU-DENTAL GmbH Am Burgberg 20 58642 Iserlohn Germany Tel. +49 2374 9288-0 gmra@scheu-dental.com

2 Composition / information on ingredients

Chemical characterization

Designation:	Stainless steel 1.4301 (Hinge system); X5CrNi18-10 Stainless steel 1.4305 (hexagon screws; slotted screws); X8CrNiS18-9
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Components:

Description	CAS No	1.4301 Quantity	1.4305 Quantity
Carbon (C)	7440-44-0	≤ 0.07 %	≤ 0.10 %
Silicon (Si)	7440-21-3	≤ 1.00 %	≤ 1.00 %
Manganese (Mn)	7439-96-5	≤ 2.00 %	≤ 2.00 %
Phosphorus (P)	7723-14-0	≤ 0.045 %	≤ 0.045 %
Sulfur (S)	7704-34-9	≤ 0.015 %	≤ 0.15 – 0.35 %
Chromium (Cr)	7440-47-3	= 17.5 – 19.5 %	= 17.0 – 19.0 %
Nickel (Ni)	7440-02-0	= 8.0 – 10.5 %	= 8.0 – 10.0 %
Nitrogen (N)	7727-37-9	≤ 0.11 %	≤ 0.11 %
Copper (Cu)	7440-50-8		≤ 1.0 %
Iron (Fe)	7439-89-6	rest	rest

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3 Handling and storage

Handling

Information for safe handling:

Parts of orthodontic appliances can break off and be accidentally inhaled or swallowed. The appliance must no longer be worn if it is visibly damaged.

Storage

Storage conditions:

No special conditions required

4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value
Form	-	solid
Colour	-	grey
Odour	-	odourless

4.2 Biological properties / Biocompatibility

A biological evaluation was carried out for the material in accordance with DIN EN ISO 10993-1. It meets the requirements regarding biocompatibility for medical devices.

5 Stability and reactivity

Thermal decomposition / Conditions to avoid:

No decomposition by intended use.

6 Disposal

The raw material can be recycled after separation or deposited of like commercial or household waste.

The above information is provided to the best of our knowledge. In addition to the information provided, it is recommended to check the suitability of the products individually regarding the respective application and associated procedures and purposes.

Serious incidents in connection with the use of the product shall be reported immediately to the manufacturer (gmra@scheu-dental.com) and the competent authority.