

# Certificate

## Biocompatibility Test

**Material tested:**

**Wironit® LA**

**Dental Casting Alloy for Cobalt-Chromium-Technique Type 5  
accord. ISO 22674**

**Composition/  
in % by weight:**

Co 63.5	Cr 29.0	Mo 5.0	Si 1.2	Mn, N, C, Ta
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**Manufacturer:**

**BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG**

Technologiepark Universität · Wilhelm-Herbst-Str. 1 · 28359 Bremen, Germany

**Tests:**

We confirm that the following tests for determining the biocompatibility of the dental alloy were carried out in accordance with the international standards ISO 10993-1992, "Biological evaluation of medical devices" (ISO 10993-1, ISO 10993-5, ISO 10993-10, ISO DIS 10993-12), DIN EN 30993-1: 1994, and ISO/FDIS 7405: 1996 "Preclinical evaluation of biocompatibility of medical devices used in dentistry – Test methods". The tests were performed according to the OECD code "Good Laboratory Practice" (GLP) by the institutes RCC, Switzerland, and BSL Bioservice, Germany. The tests were coordinated and monitored by Dr. Henning + Co., Switzerland. The specimens were produced by lost wax casting procedure in a commercial dental laboratory, according to the instructions of the manufacturer BEGO.

**Cytotoxicity:**

The cytotoxic potential of the dental alloy was tested in vitro with L-929 fibroblasts: "Test on extracts", XTT staining, ISO 10993-5, DIN EN 30993-5, ISO DIS 10993-12 and ISO/FDIS 7405: 1996, (5.4.a.3).

**Test result:**

**Wironit® LA had no cytotoxic potential.**

**Skin irritation and allergic sensitization:**

Skin irritation and allergic sensitization were tested with the modified epicutaneous test according to Buehler, ISO 10993-10: 1995, (6.3), "Tests for irritation and sensitization", ISO/FDIS 7405: 1996 (5.4.b), OECD 406-92 and Directive 92/69 EEC B.6.

**Test result:**

**Wironit® LA did not cause skin irritation or allergic sensitization.**

Dr. Henning + Co.  
Dental Engineering  
Steinenvorstadt 13  
CH-4051 Basel

