## **CERTIFICATE**

## of biocompatibility

## Mediloy® M-Ti4

Mediloy® M-Ti4 is an unalloyed dental titanium for milling. It is suitable for the fabrication of crowns and bridges or metal-ceramic crowns and bridges, as well as implant prosthetics.

Composition in % by mass:

Ti 100,0

The alloy corresponds to ISO 22674 and ISO 9693-1.

Mediloy® M-Ti4 is free of nickel, beryllium, cadmium and lead in accordance with ISO 22674.

Manufacturer: BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG

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

Production: Mediloy® M-Ti4 is produced in accordance with ISO 9001 and ISO 13485 and is approved as a class IIb

medical device in the EU.

Mechanical properties:

The mechanical requirements in accordance with ISO 22674 have been satisfied.

Tests and results:

Corrosion

A corrosion resistance test in accordance with the ISO 22674 "Metallic materials for fixed and removable restorations and appliances" standard has been performed. The value recorded was considerably lower than the threshold value for the ion release (corrosion) of 200  $\mu$ g/cm² in 7 days defined by the standard. The corrosion resistance and intra-oral biocompatibility are thus confirmed.

Cytotoxicity

A test for potential cytotoxicity in accordance with the internationally applicable ISO 10993-5 standard has been performed. No cytotoxic potential was determined.

Final evaluation:

It is hereby confirmed that the material has been evaluated in accordance with the internationally applicable EN ISO 10993-1: "Biological evaluation of medical devices" standard. The evaluation includes, amongst

other things, possible risks such as cytotoxity, sensitisation, irritation and genotoxicity.

The tests conducted were performed in independent testing facilities in accordance with the specifications of the OECD guidelines and in compliance with the GLP (Good Laboratory Practice) requirements.

The evaluation confirms the biological compatibility of Mediloy® M-Ti4 when used in accordance with the intended purpose.

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March 15<sup>th</sup>, 2020

Dr.-Ing. Stephan Kim

Chief Development and Innovation Officer

BEGO Bremer Goldschlägerei Wilhelm Herbst GmbH & Co. KG **Dr. Roland Strietzel** 

Edual Stretze

Medical Devices Safety Officer

BEGO Bremer Goldschlägerei Wilhelm Herbst GmbH & Co. KG