Wironit®
Co64Cr28.6Mo5Si1MnC
CE 0197

Instructions for use

Cobalt-chrome partial denture alloy, Type 5
Wironit® is available as cylinder.
Wironit® equates to ISO 22674.

Alloy characteristics

Bio certificate✓
According to ISO 22674 free of nickel, cadmium, beryllium and lead
Type (accord. to ISO 22674) 5
Density (g/cm³) 8.2
Preheating temperature (°C) 950–1050
Melting interval (°C) 1320–1390
Casting temperature (°C) 1460
Modulus of elasticity (GPa) 211
0.2 % elongation limit (Rp0.2) [MPa] 600
Tensile strength (Rm) [MPa] 880
Ductile yield (AS) [%] 6.2
Hardness (HV10) 350
BEGO color code light grey (white)

Investment material:
phosphat bonded, e. g Wiroinvest (REF 51046)

Crucible material ceramic
Veening ceramic not veneerable with ceramic
Flux e. g. Minoxid (REF 52530)

Brazing material: Kobalt Chrom-Lot (REF 52520)
Laser wire: Wiroweld (REF 50003, 50005)
Melting powder Wiromelt (REF 52526)

Indications for use: Wironit® is a cobalt chromium based casting and suitable for partial dentures and combination dentures. Not veneerable with ceramics!

For professional use only: Rx only

Contraindications: No contraindications are known. However, unwanted biological reactions as such allergies to contents of the alloy or electrochemically based reactions may very rarely occur. In case of known incompatibilities and allergies to contents of the metallic material it should not be used.

Warnings: Metal dust is harmful to your health. When grinding and blasting use suitable air extraction system / ventilation at the workplace and breathing mask type FFP3-EN149!

Precautions: In case of occlusal or approximal contact with a different alloy electrochemically based reactions may very rarely occur. Safety and effectiveness in treatment of children or treatment of pregnant or nursing woman have not been established. Wironit® may influence negatively the interpretation of MRI investigations.

Adverse reactions: No adverse reactions are known. Nevertheless, the rare case of occurrence of individual reactions against single components of Wironit® can never be excluded completely. In this case, the application of Wironit® should not be continued.

Prescription device: Caution: US Federal law restricts this device to sale by or on the order of a licensed dentist.

Modelling/Sprue system: Always place spures in the most solid wax-up areas, e. g. at the transition between saddle and base. Provide solid places which the melt can only reach through a thinly modelled area with an additional sprue (Ø 3 mm). In case of bruxism stronger moulding is required. Do not taper the sprue.

Investing/preheating: Use phosphate-bonded partial-denture investment materials
Melting/casting: Do not overheat alloy. Use only clean ceramic-crucibles, one crucible per alloy. Recommendation. to enable an exact identification of each case cast new metal only. In case of re-casting; only re-cast identical alloys. Blast old material thoroughly. Add at least 50 % of new material. If applicable use melting powder (REF 52525). Follow the instructions of the manufacturers of the casting devices for parameters and casting procedures. After casting the mould should cool down slowly.

After deflasking: Blast with Korox® 250 at approx. 4 bar. Critical areas – e. g. inner clasps sides and stress breakers – are to be blasted extremely carefully (Blasting devices: Duostar or EasyBlast, Korox® 50 blasting material). Use fine carbide, ceramically bonded stones or BEGO sintered diamond milling tools for finishing.

Polishing: polishing (Elipropol polishing unit, Wiropol polishing liquid), rubber-polishing (BEGO rubber polisher, black) and finish-polishing (BEGO cobalt chrome polishing paste, blue). Clean thoroughly (steam clean or boil in aqua dest.).

Acrylic veneering: For veneering with acrylic material follow the recommendations of the manufacturers.

Soldering/brazing: Fixate the parts with soldering investment material (e. g. Bellatherm® REF 51105). The prepared gap shall not exceed 0.2 mm with parallel walls. Use a suitable BEGO flux. The flux residues and oxides must be etched off. Clean surface thoroughly by steam cleaning or boiling in aqua dest.

Laser welding: If applicable use V-seam and filler material. Follow manufacturer’s instructions for use and hazard notes of the laser welding devices.

Storage conditions: none

Limit of Liability: Except where prohibited by law, BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

Warranty: Whether given verbally, in writing or by practical instructions, our recommendations for use are based upon our own experience and trials and can be considered as standard values. Our products are subject to a constant further development. Therefore alterations in construction and composition are reserved.

US Labeling requirements: The device labeling meets the recommendations of FDA applicable guidance documents. Any serious incident that has occurred in relation to Wironit® should be reported to BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG and the competent authority.

Manufacturing process:

Consult instructions for use
Caution
non-sterile

Date of manufacture
Manufacturer

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