

Product Description

Ivotion Dent and Ivotion Dent Multi are tooth-coloured discs for the CAD/CAM technique to fabricate permanent denture teeth for removable denture prosthetics using a subtractive manufacturing process.

Composition: Highly cross-linked DCL material

Typical material properties

Chem. description	PMMA-based DCL material
Flexural strength	≥ 80 MPa
Water absorption	≤ 40 $\mu\text{g}/\text{mm}^3$
Water solubility	≤ 75 $\mu\text{g}/\text{mm}^3$

Indication

Artificial individual teeth and tooth segments for the removable denture prosthetics.

Contraindication

The use of Ivotion Dent (Multi) is contraindicated if the patient is known to be allergic to any of its ingredients.

Side effects

Systemic side effects are not known to date. In individual cases local allergic reactions to methyl methacrylate materials have been reported.

Processing with CAD/CAM

During construction, a minimum wall thickness of 2.5 mm must be observed. Failure to observe the minimum thickness may result in failures (e.g. fracture of the restoration) and compromise the shade effect.

In addition to fabricate individual teeth, it is also possible to fabricate tooth segments with multi units. When finishing segments manually, make sure that the connector dimension remains as large as possible.

Ivotion Dent (Multi) discs can be processed in CAD/CAM milling systems with a standard holder of 98.5 mm. Only use milling tools recommended for this milling system when processing the material. Please note that the material can be subject to overheating if milling tools, polishing brushes or steam cleaners are handled incorrectly. This may result in the material being damaged.

Ivotion Dent Multi must be placed in the milling machine so that the printed side is pointing toward the incisal/occlusal region of the restoration. The printed side corresponds with the incisal-occlusal side.

Processing after the milling procedure

After milling in the CAD/CAM device, the restoration is separated from its holder with a fine tungsten carbide bur or a diamond separating disk and the attachment points are smoothed out using cross-cut tungsten carbide burs to prevent possible injury by sharp edges. Make sure that the anatomical surface structure is not too seriously damaged.

Finishing

The following procedure is recommended for finishing Ivotion Dent (Multi) restorations:

- Carry out shape adjustments with cross-cut tungsten carbide burs (overheating of the material must be avoided)
- Check the fit of the teeth or tooth segments before cementation in the milled denture base
- In case of interfering contacts in the tooth cavity of the denture base, the tooth should be adjusted.
- Make sure that the minimum thickness is maintained even after the minor adjustments.

Polishing

Careful polishing is the prerequisite for an optimum esthetic result.

Polishing reduces plaque accumulation and the resulting shade disturbances. Interdental areas and occlusal surfaces should be given special attention.

Manual polishing of the restoration is carried out with rotary instruments and polishing paste.

In order to achieve an optimum surface gloss, please observe the following procedure:

- Polish the restoration at a suitable rpm using the handpiece and gentle pressure to avoid heat development
- Smooth out the surface (convex areas) of the natural structure, as well as the marginal ridges and the interdental areas with rubber polishers and silicone polishing wheels
- Pre-polishing is done with the handpiece / goat hair brushes and fine pumice / Universal Polishing Paste.
- The restorations are polished to a high gloss using a goat hair brush, cotton or leather buff, as well as Universal Polishing Paste.
- Modify the goat hair brush to become star-shaped in order to optimally polish the interdental area and occlusal surfaces. Given the smaller size brush, only the desired areas are polished.
- Depending on the type of high gloss desired, leather buffs can be used to achieve a high shine, while cotton buffs are used to achieve a lesser degree of lustre.

Important processing restrictions

The following points have to be observed for the successful working with Ivotion Dent (Multi):

- Observe the required minimum thickness (2.5 mm)
- Milling the discs using only a compatible CAD/CAM system
- Staining/layering using materials that are approved and/or recommended

Ivotion Dent Ivotion Dent Multi

EN Instructions for Use
DCL tooth material for the
CAD/CAM technology

DE Gebrauchsinformation
DCL-Zahnmaterial für die
CAD/CAM-Technologie

FR Mode d'emploi
Matériau dentaire DCL pour
la technologie CAD/CAM

IT Istruzioni d'uso
Materiale DCL per denti per la
tecnologia CAD/CAM

ES Instrucciones de uso
Material DCL para dientes para
procesado CAD/CAM

PT Instruções de Uso
Material do dente DCL para a
tecnologia CAD/CAM

General instructions

- When using Ivotion Dent Multi, always pay attention to the placement direction (incisal and dentin).
- Ivotion Dent (Multi) is based on the A – D shade system.
- With Ivotion Dent Multi the incisal area and therefore the general esthetics vary slightly according to the position of the restoration in the CAD/CAM software.
- For reasons of esthetics, the material is not suitable for the fabrication of crowns, bridges, hybrid abutments due to its high translucency.
- Avoid overheating of the material when finishing or when using an alcohol torch.
- Failure to observe the stipulated limitations of use and processing instructions may lead to failure.
- Contact of solvents or monomer may lead to white discolouration.
- Do not inhale grinding dust during finishing. Use extraction equipment and wear a mask.
- After removing the material from the packaging protect it from direct sunlight.
- Keep out of the reach of children!

Deutsch

Produktbeschreibung

Ivotion Dent und Ivotion Dent Multi sind zahnfarbene Scheiben für die CAD/CAM-Technik, aus denen im abtragenden Fertigungsverfahren definitive Prothesenzähne für die abnehmbare Prothetik hergestellt werden.

Zusammensetzung: Hochvernetztes DCL-Material

Typische Materialeigenschaften

Chem. Beschreibung	PMMA-basiertes DCL-Material
Biegefestigkeit	≥ 80 MPa
Wasseraufnahme	≤ 40 µg/mm ³
Wasserlöslichkeit	≤ 7,5 µg/mm ³

Indikation

Künstliche Einzelzähne und Zahnsegmente für die abnehmbare Prothetik.

Kontraindikation

Bei erwiesener Allergie auf einen der Inhaltsstoffe.

Nebenwirkungen

Systemische Nebenwirkungen sind nicht bekannt. In Einzelfällen wurden bei methylnmethacrylathaltigen Materialien lokale allergische Reaktionen beschrieben.

Verarbeitung mittels CAD/CAM

Beim Design darf die Mindest-Wandstärke von 2,5 mm nicht unterschritten werden. Wird der Mindestwert nicht eingehalten, kann dies zum Misserfolg (z.B. Bruch der Restauration) führen und sich negativ auf die Farbwirkung auswirken.

Neben der Herstellung von Einzelzähnen besteht auch die Möglichkeit, Zahnsegmente mit mehreren Gliedern zu fertigen. Beachten Sie bei der manuellen Ausarbeitung von Segmenten, dass ein möglichst grosser Verbinderquerschnitt erhalten bleibt.

Ivotion Dent (Multi)-Scheiben können in CAD/CAM-Frässystemen mit einer Standardhalterung von 98,5 mm bearbeitet werden. Zur Bearbeitung ausschliesslich die für das Frässystem empfohlenen Fräswerkzeuge nutzen. Bitte beachten Sie, dass durch den unsachgemässen Einsatz von Fräswerkzeugen, Polierbürsten oder Dampfstrahlern das Material einer Überhitzung ausgesetzt werden kann, dies wiederum kann zu einer Schädigung des Materials führen.

Ivotion Dent Multi ist in der Fräsmaschine so zu positionieren, dass die bedruckte Seite nach der inzisalen/okklusalen Seite der Restauration ausgerichtet ist. Die bedruckte Seite entspricht somit der Inzisal-Okklusalseite.