Instruction For Use
Ortho IBT

NextDent™ Ortho IBT is a monomer based on acrylic esters for manufacturing of 3D-printed Indirect Bonding Trays. Suitable for printing all types of Indirect Bonding Trays. NextDent™ Ortho IBT is a class I material and CE-certified.

The following instructions for use are for dental professionals who use NextDent™ Ortho IBT as a indirect bonding tray material. NextDent™ Ortho IBT is intended exclusively for professional dental work. This instruction for use provides also information about safety and environmental aspects, a safety datasheet is available on www.nextdent.com and at local dealers. In case more information is needed about the processing of NextDent™ Ortho IBT material contact the NextDent office. Also see information at the end of this document.

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Description and effects
NextDent™ Ortho IBT can be used in combination with all laser and DLP based 3D-printers, which support NextDent materials.

Contra-indication
NextDent™ Ortho IBT should not be used for any other purpose than for dental work only. Any deviation from this instruction for use may have negative effect on the chemical and physical quality of NextDent™ Ortho IBT. In case of an allergic reaction, please contact a medical physician.

Hazard & Precaution (H&P phrases)

Inhalation:
Irritating to respiratory system. High atmospheric concentrations may lead to irritation of the respiratory tract, dizziness, headache and anesthetic effects.

Ingestion:
Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract. May cause sensitization by skin contact. Ingestion concentrations may lead to irritation of the respiratory tract, dizziness, headache and anesthetic effects.

Eye contact:
Repeated and/or prolonged contact may cause dermatitis. May cause sensitization by skin contact. Irritating to skin, concentrations may lead to irritation of the respiratory tract, dizziness, headache and anesthetic effects.

Skin contact:
May cause sensitization by skin contact, irritating to skin, repeated and/or prolonged contact may cause dermatitis.

Irritating to respiratory system. High atmospheric concentrations may lead to irritation of the respiratory tract, dizziness, headache and anesthetic effects.

Processing / Post-curing

Make sure that you work as clean as possible, dirty reservoirs or machines can cause deformation and therefore failure of the printed objects!

Shake for 5 minutes before use
Before using NextDent™ Ortho IBT, make sure to mix the product in the original packaging for 5 minutes. Color deviations and print failures may occur when shaken insufficiently.

Fill printer reservoir
Pour the liquid material in the reservoir of the 3D-printing machine.

For printer settings see IFU of 3D Printer
Follow the instructions for use of the printer. These are delivered together with the printer.

Remove printed parts from platform
When the machine has finished its program remove the building platform from the machine. Place the platform on some paper or cloth with the built jobs facing upwards. The printed jobs can know be removed from the platform using a suitable knife.

Cleaning Pieces step 1
Rinse the printed jobs for three minutes in an alcohol solution (>90%) to eliminate any excess material, using of an ultrasonic bath.

Cleaning Pieces step 2
Rinse for two minutes in a clean alcohol solution (>90%). Rinse in a alcohol solution should not take longer than 5 minutes, as this may cause defects in the printed parts.

Post-Cure
After cleaning make sure the printed parts are dry and free of alcohol residual. Then place the printed jobs in a UV-light curing box for final polymerization.

Post-curing is an UV-light treatment to ensure that NextDent™ materials obtain full polymer conversion. Through this the residual monomer is reduced to a minimum and the required mechanical properties are obtained. This procedure is a necessary step to produce a biocompatible end-product. We strongly advice to make use of the NextDent™ LC 3D Printbox.

Specific curing-time NextDent™ Ortho IBT

<table>
<thead>
<tr>
<th>NextDent Material</th>
<th>Time (min)</th>
<th>Wavelength (nm)</th>
<th>Total output (W*sec)</th>
<th>UV lightbox output (kJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho IBT</td>
<td>10</td>
<td>Blue UV-A 315-400, UV-Blue 400-550</td>
<td>UV-A 72, UV-Blue 72</td>
<td>129,6</td>
</tr>
</tbody>
</table>

The unit used at NextDent has 6x 18W/71 lamps (Dulux L Blue) and 6, 18W/78 lamps (Dulux blue UV-A). The calculated output is based on the UV light UVA lamp Blue. Please notice that the light sources and the printing machine need a routine maintenance following the manufacturer instructions.

Finishing
Remove any support structures and finish jobs if necessary, using conventional dental methods and instruments. Differences in color nuance may occur due to production in batches of the raw material and product or inadequate shaking of the original packaging before use or insufficient post-curing.

Storage conditions, expiry date and transport
Store the product in the original packaging at room-temperature in a dry and dark area, preferably not exceeding 25°C. Close the packaging after each use. The expiry date of the product is mentioned on the product label. In case of exceeding the expiry date, the product is no longer guaranteed in terms of treatment. Do not expose to UV-light and moisture.

Plastic and packaging waste
The product NextDent™ Ortho IBT in its polymerized form is not environmentally harmful. Residual waste material in its liquid state should be delivered to a collection point for chemical waste material.

Cleaning instructions
NextDent™ 3D-printing material should be cleaned with non-chemical products. If disinfecting before intended use is required, an ethanol solution can be used.

Delivery units
The product NextDent™ Ortho IBT is available in the following packaging sizes: 1000 gr.