Micro Material

E-Appliance M

EnvisionTEC's E-Appliance M is a new 3D printing material that is ideal for the 3D printing of orthodontic models. E-Appliance is a specially designed nano-filled resin that will work reliably with both polyvinyl alcohol based-separators and tin foil substitute for a "salt and pepper" technique of producing an orthodontic appliance. This method of in-house or lab-based construction of orthodontic removable or fixed appliances provides excellent strength and durability combined with an amazing array of design latitude for individuality of expression for the patient. Models that have been printed with E-Appliance offer the detailed precision and high quality surface finish that EnvisionTEC is known for coupled with a surface that accepts a wide range of separator mediums for the perfect removal of the finished appliance from the model.

Material Properties*		
Description		**Value**
Tensile Strength	ASTM D638	53 MPa
Tensile Modulus	ASTM D638	3000 MPa
Elongation at Break	ASTM D638	3.3%
Flexural Strength	ASTM D790	93 MPa
Flexural Modulus	ASTM D790	2980 MPa
Heat Deflection Temperature (no heat treatment necessary) at 1.92 MPa loading	ASTM D648	48°C
Impact Izod	ASTM D256	20.4 J/m
Build Speed on Micro Ortho at 100 µm voxel depth		62 minutes per inch
Build Speed on Micro Ortho at 150 µm voxel depth		42 minutes per inch

*All data provided is preliminary data and must be verified by the individual user.

Recommended Machines
Micro Ortho

Applications
Dental

EnvisionTEC GmbH
Brüsseler Straße 51 • D-45968
Gladbeck • Germany
Phone +49 2043 9875-0
Fax +49 2043 9875-99

EnvisionTEC, Inc.
15162 S. Commerce Dr.
Dearborn, MI 48120 • USA
Phone +1-313-436-4300
Fax +1-313-436-4303

www.envisiontec.com
info@envisiontec.com