

E-Guard



EnvisionTEC's FDA-approved E-Guard material is a biocompatible, crystal clear material for the production of accurate splints and retainers. The results produced by combining E-Guard with EnvisionTEC technology are superior to traditional methods of manufacturing bite guards and night guards.

It is a clear material, allowing for maximum visibility. High resolution 3D printing allows for precise fit. Finally, the cost of high quality splints and retainers can be dramatically lower in comparison to previous machining methods, making EnvisionTEC the clear choice for any digital dental laboratory.

E-Guard is listed as a Class II medical device with the FDA and licensed with Health Canada.

Material Properties ¹		
Description	Value	Standard or Method
Ultimate Flexural Strength, MPa	79-85	DIN EN ISO 20795-2:2013
Flexural Modulus, MPa	2050 - 2130	DIN EN ISO 20795-2:2013
Water Sorption, $\mu\text{m}/\text{mm}^3$	30 - 32	DIN EN ISO 20795-2:2013
Water Solubility, $\mu\text{m}/\text{mm}^3$	0.5	DIN EN ISO 20795-2:2013
Viscosity @ 30°C, cP	230 - 330	Brookfield
Cytotoxicity	Passed	ISO 10993-5
Irritation and Skin Sensitization	Passed	ISO 10993-10

Recommended 3D Printer Family²

Perfactory Family, Micro Family, cDLM Family, Envision One Family

¹ All data provided is preliminary and must be verified by the individual user

² May not be suitable for all machine models within a 3D printer family. Please refer to specific model online for compatibility.