

Micro Materials

E-Shell® 300 M Series

The EnvisionTEC E-Shell® 300 M Series has been designed especially for applications in the Hearing Aid industries and is distinguished for rigidity and durability. The material is used on Perfactory® UV machines only. EnvisionTEC E-Shell® 300 M is a liquid, photo-reactive acrylate for building functional parts. It is CE certified and Class-IIa biocompatible according to ISO 10993 (Medical Product Law) for Hearing Aid shells and otoplastics. They are tough, opaque, water- and perspiration-resistant and available in several different transparent tones like water clear, rosé clear, red, and blue.

Material Properties*		
ASTM Method	Description	E-Shell® 300 M
DIN 1342-2 DIN EN ISO 527-1 DIN EN ISO 527-2 DIN EN ISO 178	Viscosity Tensile Strength Elongation at Break Bending Strain	339.8 mPa*s 51.6 MPa 6.62 % 8.43 %
DIN EN ISO 178 DIN EN ISO 178	Flexural Modulus Flexural Strength	1,920 MPa 88.4 MPa
DIN EN ISO 180	Izod Impact - Notched	4.99 kJ/m²
DIN ISO 1183-1	Density	1.185 g/cm³
DIN EN ISO 868	Hardness (Shore D)	85 Shore
DIN 53765	Glass Transmission Temperature	86 °C - 160 °C

*Cleaning, drying and post curing is to be carried out as described in EnvisionTEC's postprocessing instructions for this material.

Recommendation: use incubator. Post curing of parts in Otofash.

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

Recommended Machines

Perfactory® Micro DSP Series

Applications

Hearing Aid

Material Properties

- » Tough function prototypes
- » Appearance models with minimal finishing
- » Durable concept models with high cross linkage
- » High humidity environment applications
- » RTV patterns
- » Water resistant applications
- » Hearing aid devices manufacturing

E-shell® 300 Series (Transparent for Ear Molds)



300 Clear



301 Rose



308 Light Brown



309 Brown



310 Clear

E-shell® 300 Series (Opaque for Ear Shells)



302 Red



303 Blue



306 Black



307 White

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