



Perfactory[®] Materials

E-Shell[®] 300 Series

The EnvisionTEC E-Shell 300 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 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
DIN 1342-2 DIN EN ISO 527-1 DIN EN ISO 527-1 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/m ²
DIN ISO 1183-1	Density	1.185 g/cm ³
DIN EN ISO 868	Hardness (Shore D)	85 Shore
D570-98	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
Desktop Digital Shell Printer, Mini Desktop Digital Shell Printer, Perfactory [®] 3 DSP, Perfactory [®] 4 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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