Perfactory® E-Shell 300

Acrylic

EnvisionTEC, Inc.

Message:

The EnvisionTEC E-Shell 300 series has been designed especially for applications in the Hearing Aid industries and is distinguished for rigidity and durableness. 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.
Applications
Hearing Aid
Features
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
Recommended Machines:
DDSP Series, Perfactory® 3 DSP, Perfactory® 4 DSP Series

General Information	
Features	Biocompatible
	Durable
	Good Surface Finish
	Good Toughness
	High Rigidity
	Humidity Resistant
	Low to No Water Absorption
Uses	Medical Devices
	Medical/Healthcare Applications
	Modeling Material
	Mold Making
	Patterns
	Prototyping
Agency Ratings	ISO 10993
Appearance	Black
	Blue
	Brown
	Clear/Transparent
	Colors Available
	Light Brown
	Opaque

	Red
	White

Forms	Liquid		
Processing Method	3D Printing, Stereolithography		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.19	g/cm³	ISO 1183
Viscosity	340	mPa·s	DIN 1342
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	85		ASTM D1004
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress	51.6	MPa	ISO 527-2
Tensile Strain (Break)	6.6	%	ISO 527-2
Flexural Modulus	1920	MPa	ISO 178
Flexural Stress (8.4% Strain)	88.4	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength	5.0	kJ/m²	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	86.0 to 160	°C	ASTM D570

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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