

E-Shell 200 Series

Durable, opaque skin tone colored, biocompatible (Class IIA) Photopolymer for use in all **Perfactory®** & **Vanquish®** Systems

Description

The E-Shell 200 series is a low viscosity liquid photopolymer that produces strong, tough, water-resistant ABS like parts with high detail that are Class-IIa biocompatible according to ISO 10993 / Medical Product Law and are CE certified for use as hearing aid products, otoplastics, and medical devices. The E-Shell 200 series is available in several different skin tone colors and can be customized on demand. Because of their opaque appearance similar to production plastic they also can be used for non medical applications.

Application

The E-Shell 200 series has been designed especially for applications in the Medical Device and Hearing Aid industries being CE marked as a medical product. E-Shell 200 mimics traditional engineering plastics ABS, which makes it usable in many other non-hearing-aid applications, such as:

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

Mechanical Properties (Metric)

ASTM Method	Description	E-Shell 200
D638M	Tensile Strength Elongation at Break Elongation at Yield Modulus of Elasticity Poisson's Ratio	57.8 MPa 6 % 3.2 % 2,400 MPa 0.2 l
D790M	Flexural Strength Flexural Modulus	103 MPa 2,300 MPa
D256A	Izod Impact-Notched	21.1 J/cm
D2240	Hardness (Shore D)	83
D1004	Graves Tear	127,000 N/m
D570-98	Water Absorption	0.12 %

Thermal & Electrical Properties (Metric)

ASTM Method	Description	E-Shell 200
D149-97a	Dielectric Strength	14.6
E1545-00	Tg	109°C

Tg = Glass Transition Temperature

All Data provided is Preliminary data and must be verified by the individual user



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