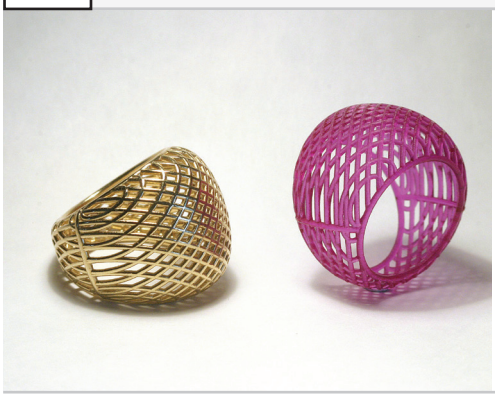
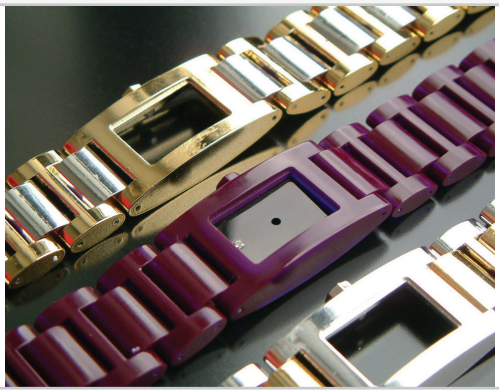
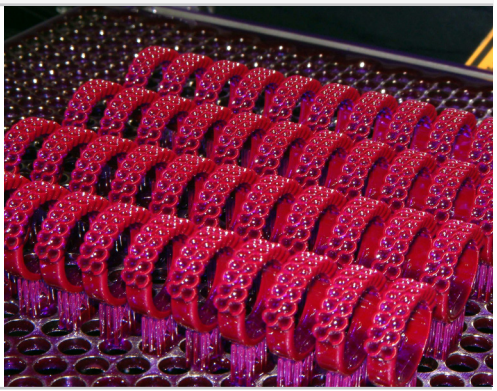
Specialty Class

Accura® Amethyst

High-resolution material for accurate master patterns for jewelry manufacturing







Technical Data

Post-Cured Material

Measurement	Condition	Metric	U.S.
Tensile Strength (MPa/PSI)	ASTM D 638	22-38	
Tensile Modulus (MPa/KSI)	ASTM D 638	3514-3996	260-287
Elongation at Break	ASTM D 638	0.56 - 1.04 %	0.56 - 1.04 %
Flexural Strength (MPa/PSI)	ASTM D 790	87-125	7540-10300
Flexural Modulus (MPa/KSI)	ASTM D 790	3652-3721	220-300
Impact Strength (J/m /Ft-lbs/in)	ASTM D 256	9-12	0.66-0.98
Heat Deflection Temperatue	ASTM D 648 @ 66 PSI @ 264 PSI	 77 °C 62 °C	 170.6 °F 143.6 °F
Coefficient of Thermal Expansion (CTE)	ASTM E 831-93 TMA (T<Tg, 0-20 °C) TMA (T<Tg, 90-150 °C)	 57 (x10-6 m/m °C) 133 (x10-6 m/m °C)	
Glass Transition (Tg)	DMA, E″	103 °C	217.4 °F
Shore D		87	87

Liquid Material

Measurement	Condition	Value
Viscosity	@ 30 °C (86 °F)	350 cps
Penetration Depth (Dp)		3.7 mils
Critical Exposure (Ec)		14.4 mJ/cm^2
Color		Purple
Solid Density	@ 25 °C (77 °F)	1.23 g/cm^3 at 25 °C
Liquid Density	@ 25 °C (77 °F)	1.1 g/cm^3 at 25 °C
Tested Build Styles		EXACT™, FAST™, Exact HR™

Features

- Accurate, high-resolution master patterns
- High resolution in X, Y, and Z dimensions
- Manufacture master patterns for jewelry and other microcasting applications

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