

Watershed

USP Grade VI & ISO 10993 Approved

Water-clear, water-resistant resin

Simulating clear, ABS thermoplastics, the Watershed is nearly completely transparent, with a smooth, water-resistant surface finish.



Benefits

- Very high tensile strength
- Very high elongation at break
- Excellent clarity

Applications

- Medical Models
- Packaging
- Water flow analysis
- RTV Patterns
- Durable Concept Models
- Wind Tunnel Testing
- Quick Cast Patterns
- Lenses



Physical Properties

Colour	Water Clear
Type	ABS like resin

Mechanical Properties

		TEST/ISO
Flexural Strength (MPa)	63.1 – 74.2	ATSM D790
Flexural Modulus (MPa)	2,040 – 2,370	
Tensile Strength (MPa)	47.1 – 53.6	ATSM D638
Tensile Modulus (MPa)	2,650 – 2,880	
Elongation Break (%)	11 – 20	
Impact Strength (J/m)	20 – 30	ATSM D256
Water Absorption (%)	0.35	ATSM D570 -98
Density (g/cm ³)	1.12	N/A

Thermal & Specific Properties

Glass Transition Temperature Tg (°C)	39 – 46	E1545 - 00
Heat Deflection Temperature (°C)		
@ 0.46 MPA	45.9 – 54.5	ATSM D648
@ 1.81 MPA	49 – 49.7	
Co-efficient of Thermal Expansion (µ/m°C)		
TMA (<Tg, -40 – 0°C)	66 – 67	ATSM E831-93
TMA (<Tg, 0 – 50°C)	90 – 96	
TMA (<Tg, 50 – 100°C)	170 – 189	
TMA (<Tg, 100 – 100°C)	185 – 189	
Dielectric Constant		
60Hz	3.9 – 4.1	ATSM D150 -98
1KHz	3.7 – 3.9	
1MHz	3.4 – 3.5	
Dielectric Strength (kV/mm)	16.3	ASTM D149 -97A
Index of Radiation	1.512 – 1.515	ASRM D542

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