OMNITECH® HCT ABS 35

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Acrylonitrile-butadiene-styrene copolymer. Unfilled. ISO 10993-5,-10 certified for medical applications.

Product information

Resin Identification	ABS		ISO 1043
Part Marking Code	>ABS<		ISO 11469

Rheological properties

Melt mass-flow rate	9	g/10min	ISO 1133
Melt mass-flow rate, Temperature	446	°F	
Melt mass-flow rate, Load	8.38	lb	
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	341000	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	6400	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	2.3	%	ISO 527-1/-2
Tensile stress at break, 5mm/min	4790	psi	ISO 527-1/-2
Tensile stress at break, 50mm/min	5080	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	8.4	%	ISO 527-1/-2
Tensile strain at break, 50mm/min	9	%	ISO 527-1/-2
Flexural modulus	363000	psi	ISO 178
Flexural stress at 3.5%	10000	psi	ISO 178
Charpy impact strength, 23°C	59.5	ftlb/in²	ISO 179/1eU
Charpy impact strength, -30°C	40.4	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	8.8	ftlb/in²	ISO 179/1eA
Charpy notched impact strength, -30°C	3.71	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	8.75	ftlb/in²	ISO 180/1A
Izod notched impact strength, -30°C	4.09	ftlb/in²	ISO 180/1A

Thermal properties

Temperature of deflection under load, 1.8 MPa	169	°F	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	190	°F	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	198	°F	ISO 306
Coefficient of linear thermal expansion (CLTE), parallel	0.50	E-4/°F	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	0.5	E-4/°F	ISO 11359-1/-2

Physical/Other properties

Water absorption, 2mm	0.4	%	Sim. to ISO 62
Density	0.0379	lb/in³	ISO 1183

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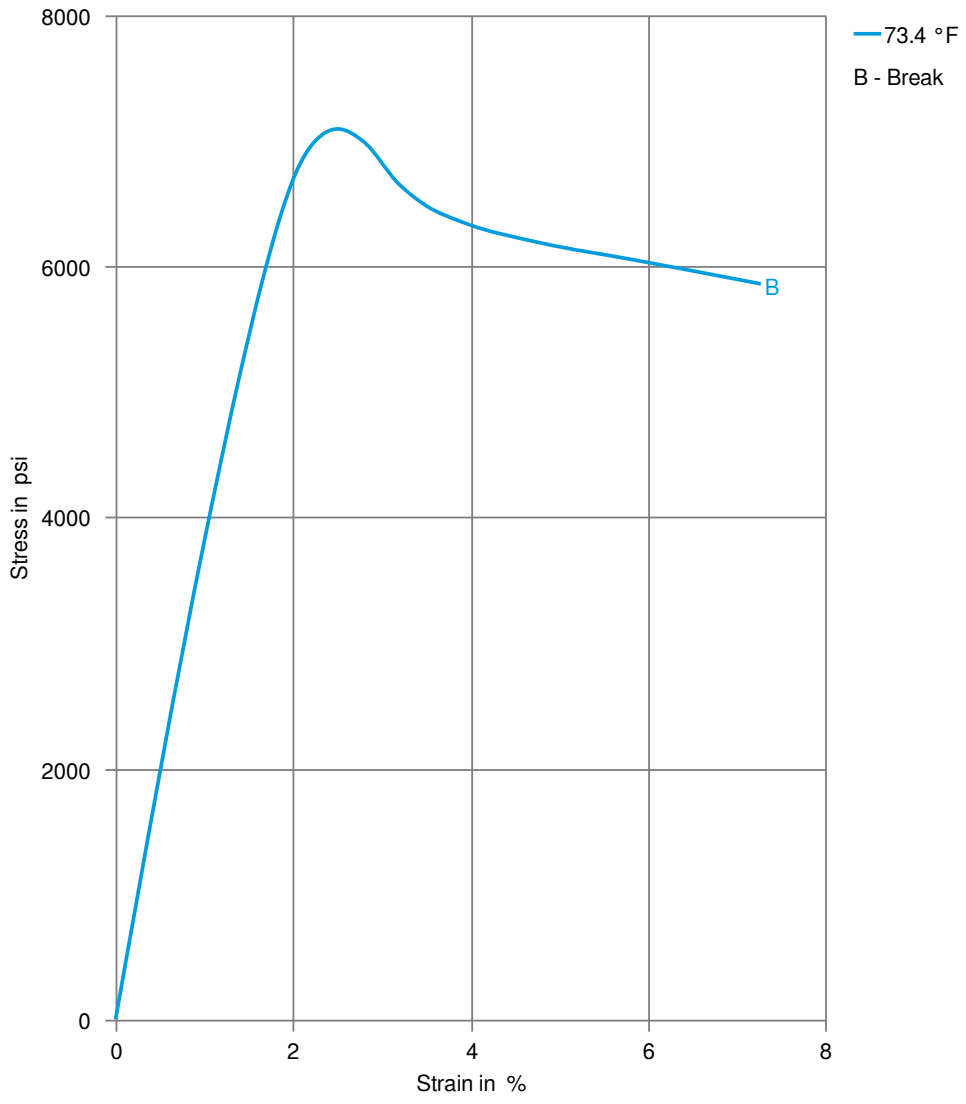
Injection

Ejection temperature	189 °F

Characteristics

Special characteristics	Specialty appearance

Stress-strain

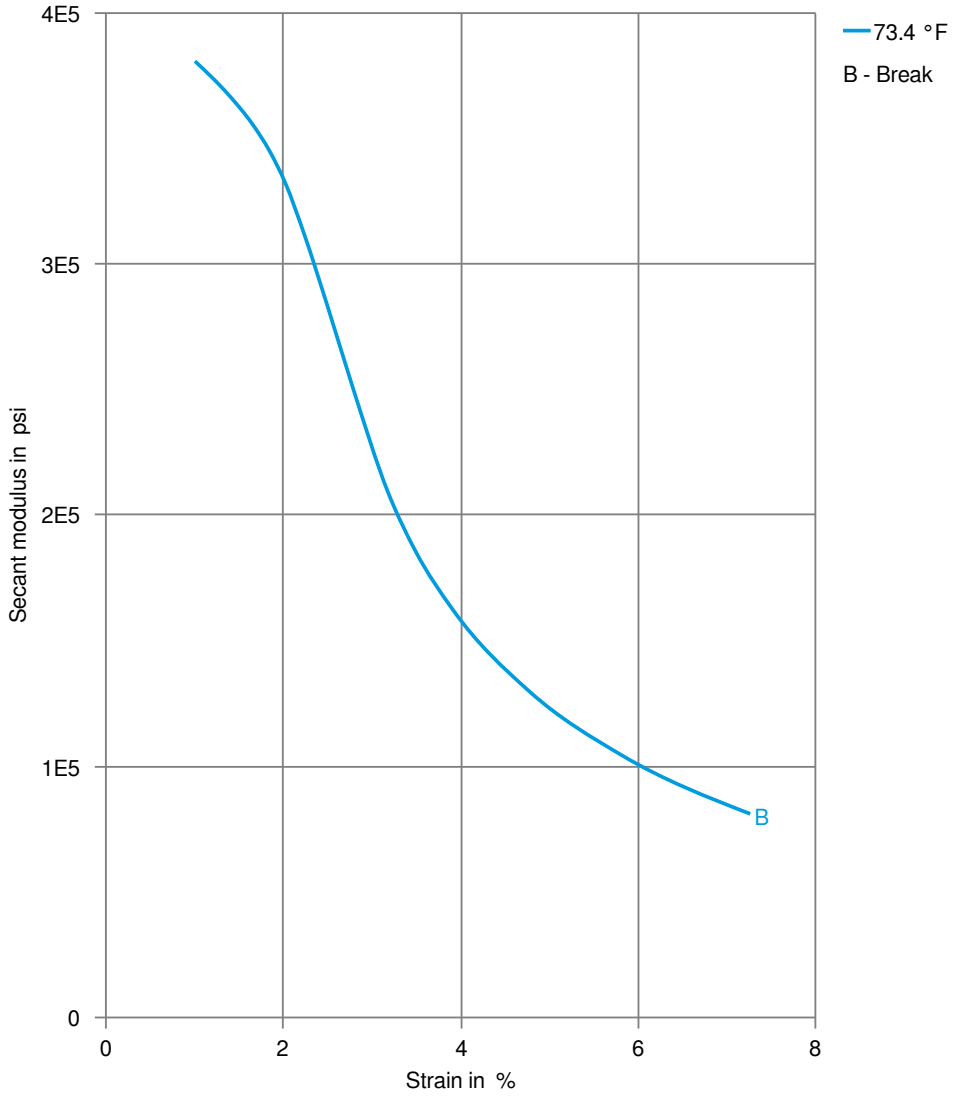


Revised: 2025-04-18 Source: Celanese Materials Database

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Secant modulus-strain



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