

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	230 °C	
Melt mass-flow rate, Load	3.8 kg	
Moulding shrinkage, parallel	0.6 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.6 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2350 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	44 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	2.3 %	ISO 527-1/-2
Tensile stress at break, 5mm/min	33 MPa	ISO 527-1/-2
Tensile stress at break, 50mm/min	35 MPa	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	2500 MPa	ISO 178
Flexural stress at 3.5%	69 MPa	ISO 178
Charpy impact strength, 23°C	125 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	85 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	18.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7.8 kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	18 kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C	8.6 kJ/m ²	ISO 180/1A
Poisson's ratio	0.38 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	76 °C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	88 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	92 °C	ISO 306
Coefficient of linear thermal expansion (CLTE), parallel	90 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	90 E-6/K	ISO 11359-1/-2

Physical/Other properties

Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1050 kg/m ³	ISO 1183

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Injection

Ejection temperature

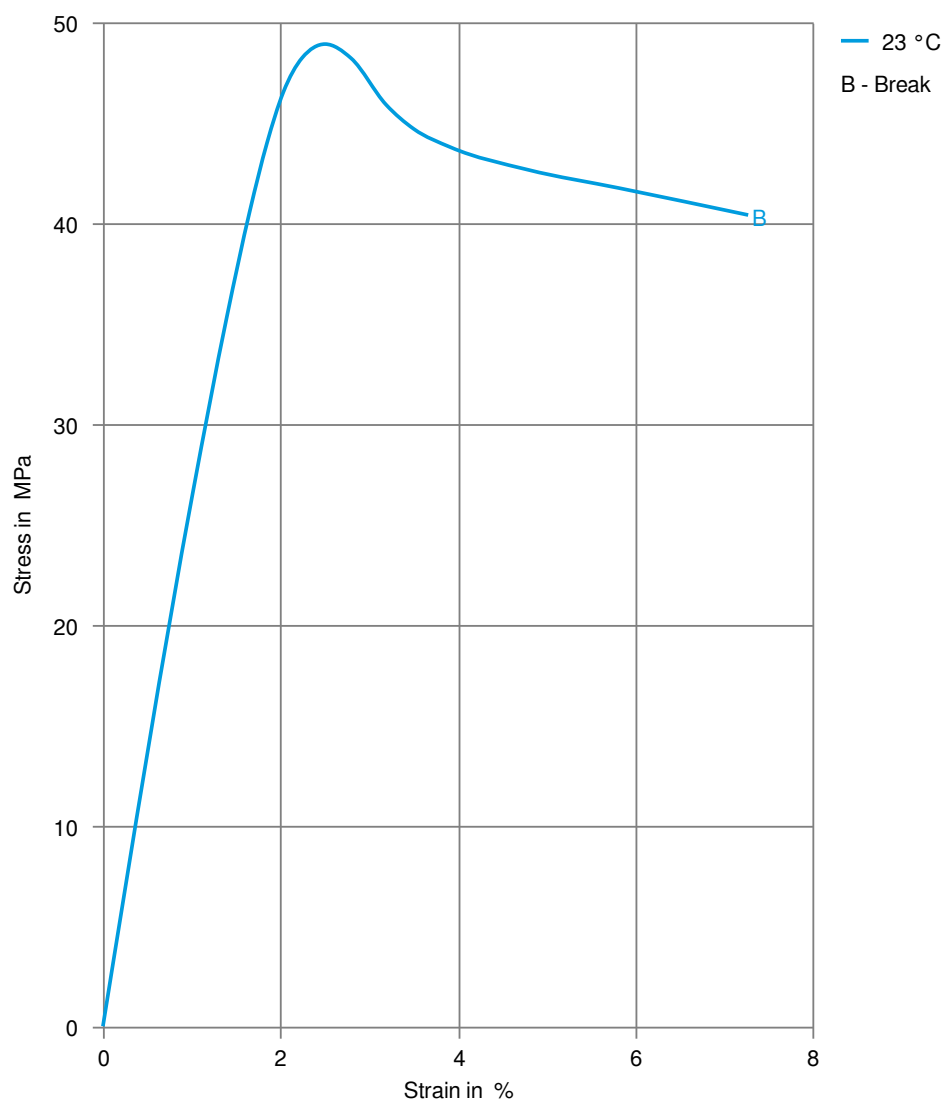
87 °C

Characteristics

Special characteristics

Specialty appearance

Stress-strain



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Secant modulus-strain

