

OMNITECH® HCT ABS 35

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

Rheological properties

Moulding shrinkage range, parallel	0.6 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.6 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2350 MPa	ISO 527-1/-2
Yield stress, 50mm/min	44 MPa	ISO 527-1/-2
Yield strain, 50mm/min	2.3 %	ISO 527-1/-2
Stress at break, 5mm/min	33 MPa	ISO 527-1/-2
Stress at break, 50mm/min	35 MPa	ISO 527-1/-2
Strain at break, 5mm/min	8.4 %	ISO 527-1/-2
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	18.4 kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C	8.6 kJ/m ²	ISO 180/1A

Thermal properties

Temp. of deflection under load, 1.8 MPa	76 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	88 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	92 °C	ISO 306
Coeff. of linear therm. expansion, parallel	90 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90 E-6/K	ISO 11359-1/-2

Other properties

Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1060 kg/m ³	ISO 1183

Injection

Drying Temperature	85 °C	
Drying Time, Dehumidified Dryer	4 h	
Processing Moisture Content	0.02 %	
Melt Temperature Optimum	238 °C	Internal
Max. mould temperature	25 - 60 °C	



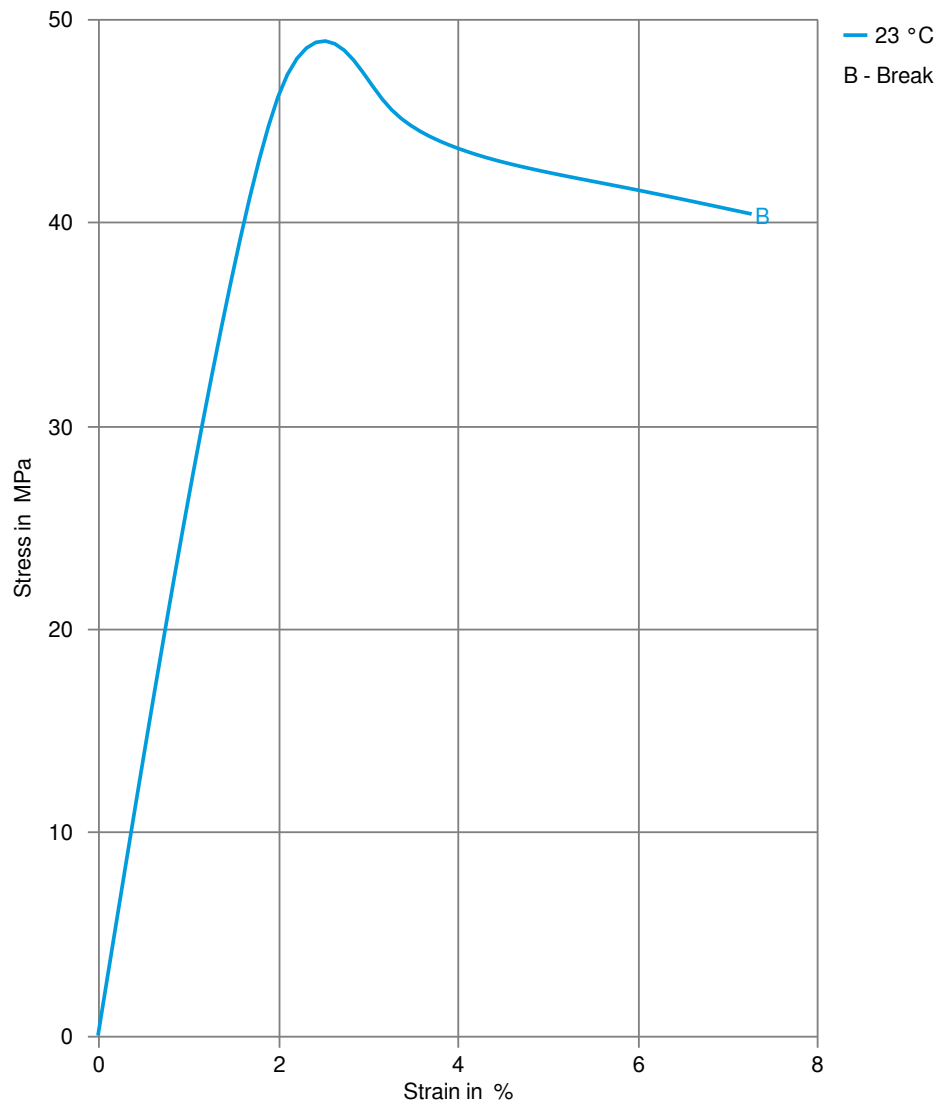
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Characteristics

Food contact

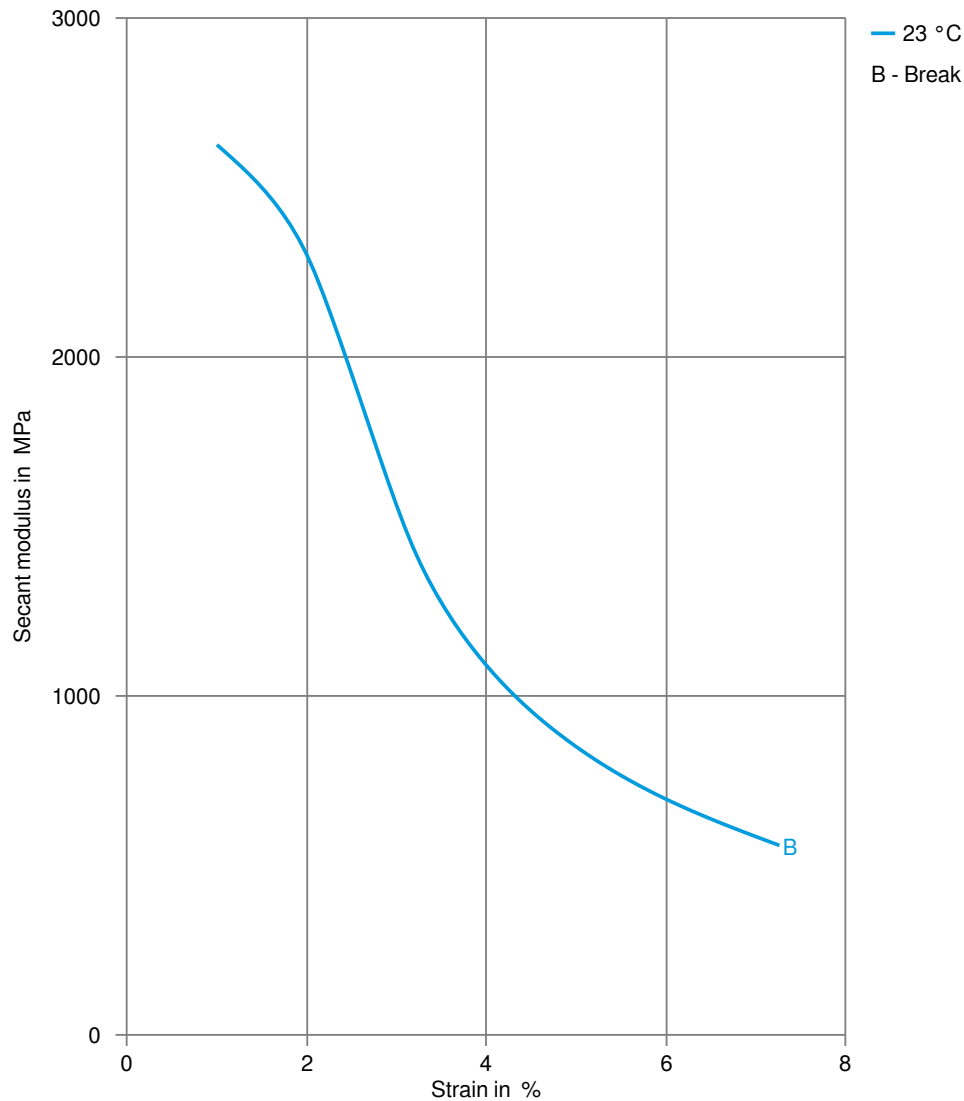
FDA 21 CFR

Stress-strain



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Secant modulus-strain



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True stress-strain

