

SARPEK® PEK

General Properties of UR100 BC3023

Items	unit	Test Method ^{*)}	Unfilled Grades/Black
			UR100 BC3023
			High viscosity
Melting Point	°C	ISO 11357-3	370
Glass transition temperature	°C	ISO 11357-2	155
Density	g/cm ³	ISO 1183	1.31
MVR (400°C, 10kg)	ml/10min	ISO 1133	9
Tensile Strength	MPa	ISO 527-1,2	110
Tensile strain at break	%	ISO 527-1,2	25
Flexural Strength	MPa	ISO 178	170
Flexural Modulus	MPa	ISO 178	4,300
Charpy notched impact strength	kJ/m ²	ISO 179/1eA	8
Deflection Temperature Under Load (1.82MPa)	°C	ISO 75-1,2	165
Mold Shrinkage (80×80×3mmt, Flow direction, Cavity Pressure 100MPa)	%	original method	2.2
Mold Shrinkage (80×80×3mmt, Transverse direction, Cavity Pressure 100MPa)	%	original method	2.1

^{*)} mainly compliant with ISO Standards or original method

Standard molding conditions of UR100 BC3023

Preliminary drying	Cylinder temperature(°C)				Mold temperature (°C)	Injection speed (mm/s)	Holding pressure (MPa)
	Nozzle	Front section	Center section	Rear section			
140~160°C more than 3hours	400~420	400~420	380~400	370~390	180~210	20~150	70~120

[Alert Notes]

*A cylinder of high temperature type is required. A nozzle diameter of standard size or larger is recommended.

*The nozzle tends to solidify, hence retraction of the injection unit as well as temperature increase of nozzle and front section of the cylinder is recommended.

*Please contact us for details.

NOTES TO USERS

- All property values shown in this brochure are the typical values obtained under conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
- It is the users' responsibility to investigate patent rights, service life and potentiality of applications introduced in this brochure. Materials we supply are not intended for the implant applications in the medical and dental fields, and therefore are not recommended for such uses.
- For all works done properly, it is advised to refer to appropriate technical catalogs for specific material processing.
- For safe handling of materials we supply, it is advised to refer to the Safety Data Sheet "SDS" of the proper material.
- This brochure is edited based on reference literature, information and data available to us at the time of creation. The contents of this brochure are subject to change without notice upon achievement of new data.
- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

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