

Crastin® SK603 NC010

THERMOPLASTIC POLYESTER RESIN

Rheological properties

Moulding shrinkage, parallel	0.3 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.1 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	7000 MPa	ISO 527-1/-2
Stress at break	120 MPa	ISO 527-1/-2
Strain at break	3.2 %	ISO 527-1/-2
Charpy impact strength, 23°C	60 kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	55 kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	9 kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	8 kJ/m²	ISO 179/1eA
Poisson's ratio	0.35	

Thermal properties

Melting temperature, 10°C/min	224 °C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	60 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	205 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	220 °C	ISO 75-1/-2

Flammability

FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	28 mm/min	ISO 3795 (FMVSS 302)

Other properties

Humidity absorption, 2mm	0.15 %	Sim. to ISO 62
Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1450 kg/m³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	120 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.04 %
Melt Temperature Optimum	250 °C
Min. melt temperature	240 °C
Max. melt temperature	260 °C
Mold Temperature Optimum	80 °C
Min. mould temperature	30 °C
Max. mould temperature	130 °C
Hold pressure range	≥60 MPa
Hold pressure time	3 s/mm

Crastin® SK603 NC010

THERMOPLASTIC POLYESTER RESIN

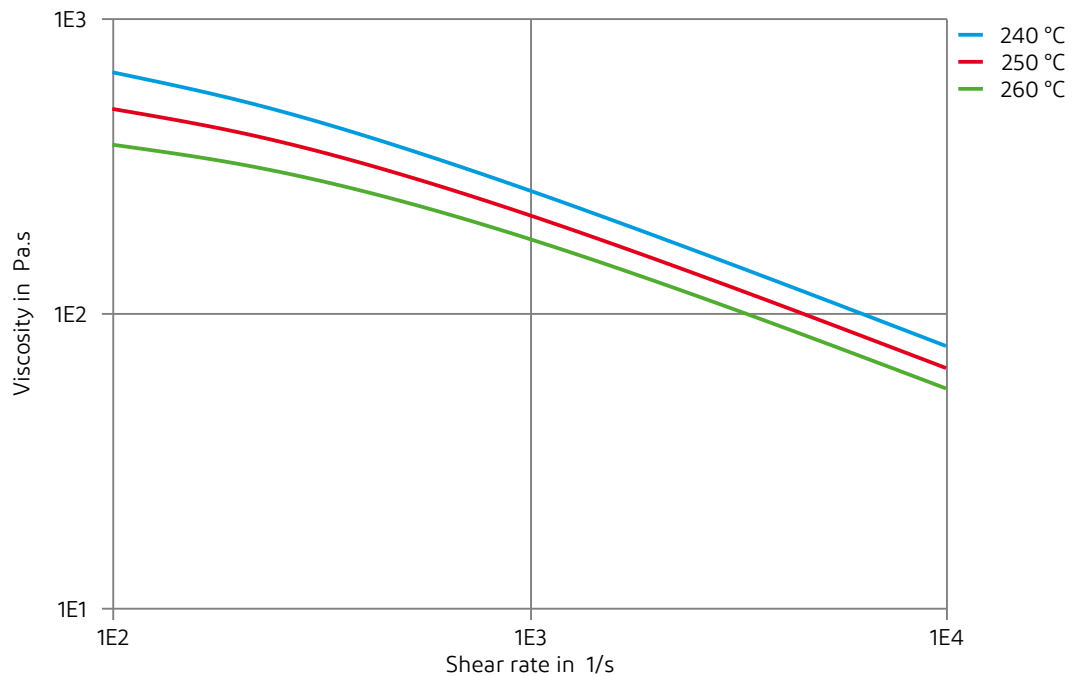
Back pressure

As low as MPa

Ejection temperature

possible
170 °C

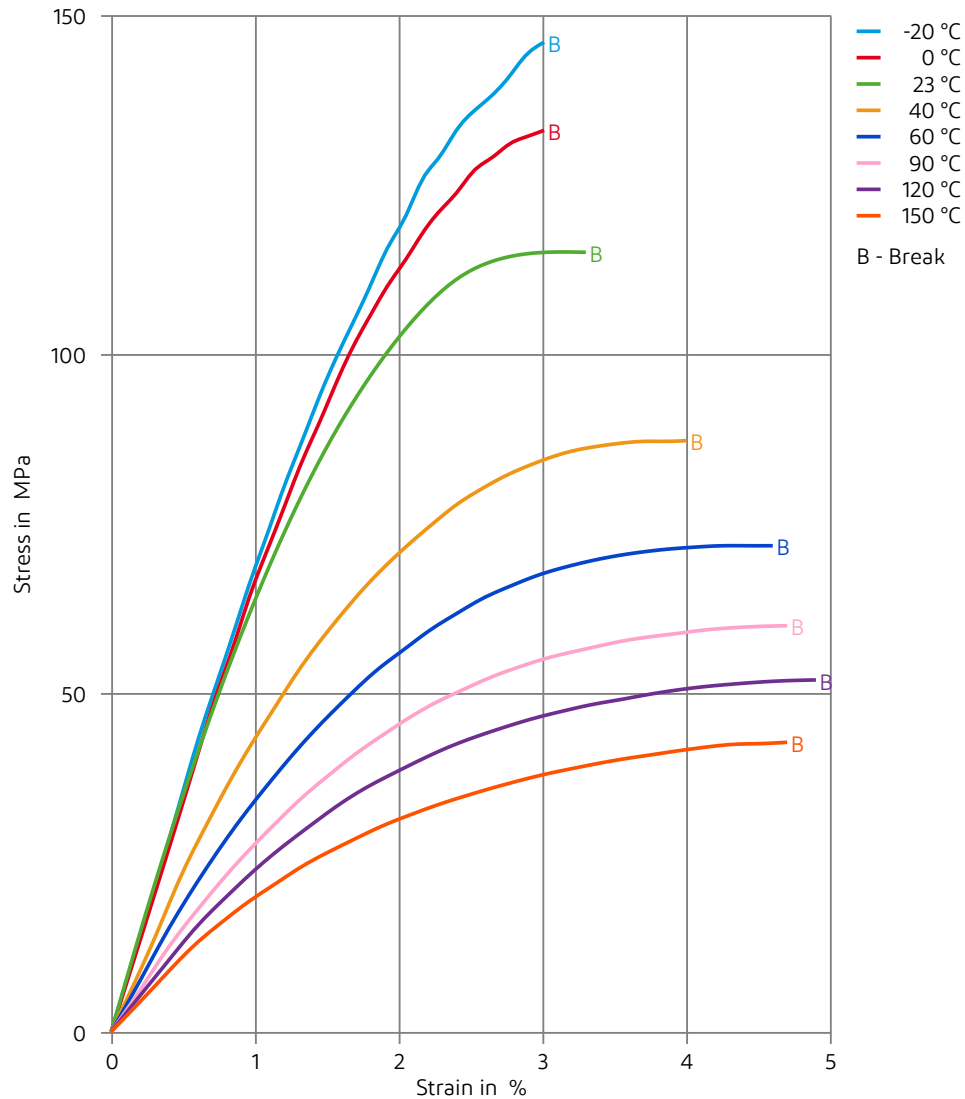
Viscosity-shear rate



Crastin® SK603 NC010

THERMOPLASTIC POLYESTER RESIN

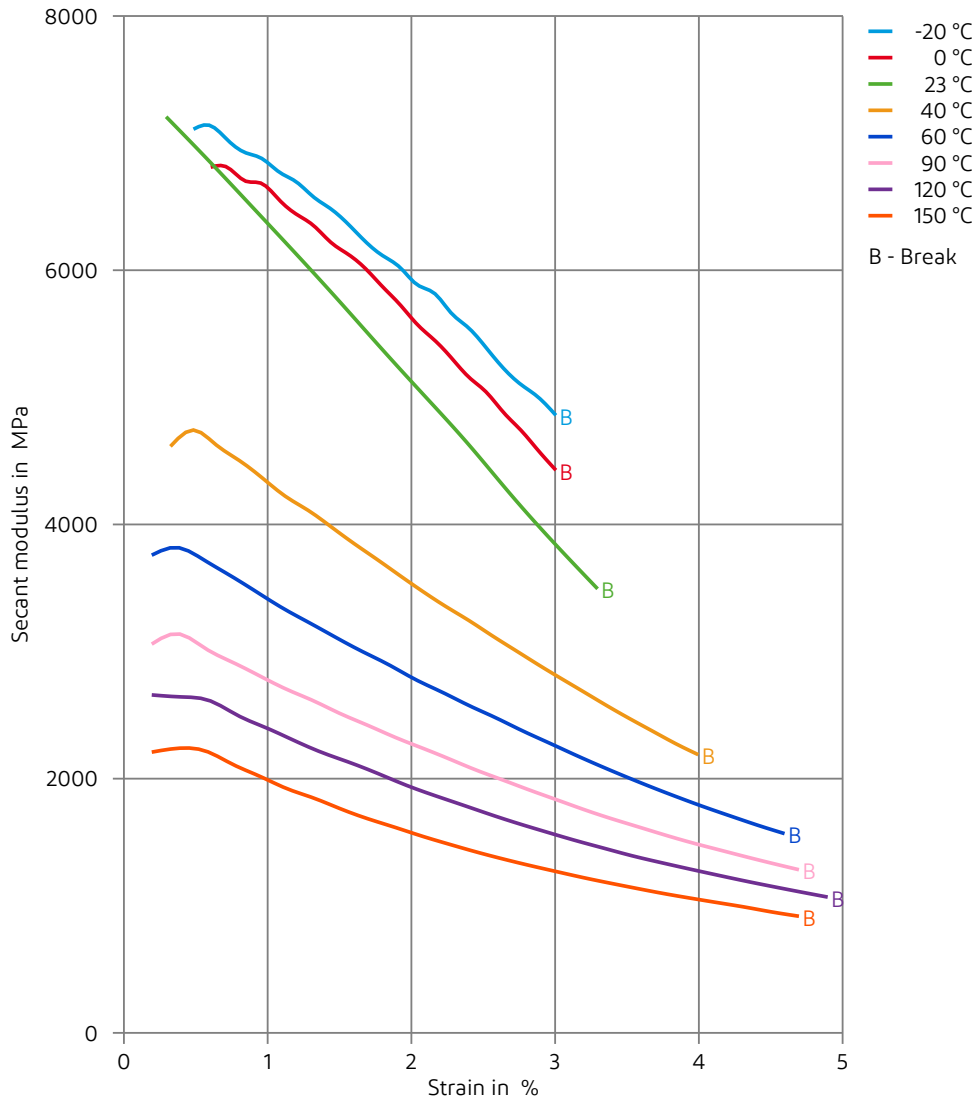
Stress-strain



Crastin® SK603 NC010

THERMOPLASTIC POLYESTER RESIN

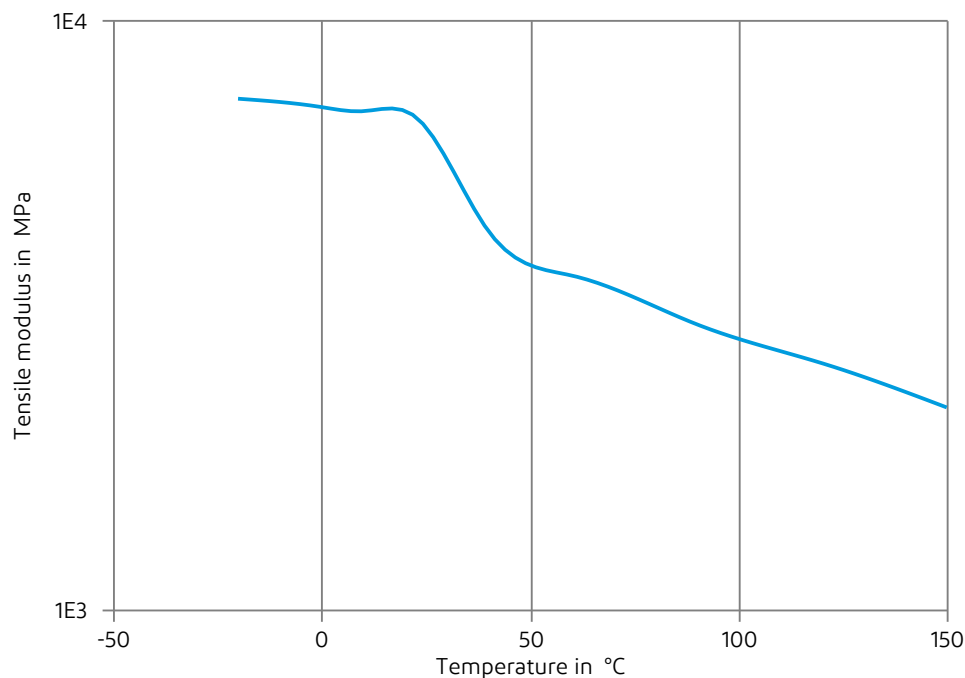
Secant modulus-strain



Crastin® SK603 NC010

THERMOPLASTIC POLYESTER RESIN

Tensile modulus-temperature



Mobility & Materials

The information set forth herein is furnished free of charge, is based on technical data that Celanese believes to be reliable, and represents typical values that fall within the normal range of properties. This information relates only to the specific material designated and may not be valid for such material used in combination with other materials or in other processes. It is intended for use by persons having technical skill, at their own discretion and risk. This information should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards and comply with applicable law. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

CAUTION: Do not use Celanese materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from Celanese under a written contract or other acknowledgement that is consistent with the Celanese policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your Celanese representative.

Celanese's sole warranty is that our products will meet our standard sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, CELANESE SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR NON-INFRINGEMENT. CELANESE DISCLAIMS LIABILITY FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.