

Toot Standard

ISO 294

Fortron 1140L0 is a 40% glass-reinforced extrusion grade. It exhibits excellent heat and chemical resistance, good electrical properties and is inherently flame-retardant. The high hardness and rigidity at elevated temperatures allows for good load bearing performance. This product has good weldability due to the modest filler level. 1140L0 is used to produce rods and slabs.

Value Heit

135 - 160 °C

Physical properties	value Unit	rest Standard
Density	<b>1650</b> kg/m³	ISO 1183
Water absorption (23°C-sat)	0.02 %	ISO 62
Mechanical properties	Value Unit	Test Standard
Tensile stress at break (5mm/min)	<b>185</b> MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	1.9 %	ISO 527-2/1A
Flexural modulus (23°C)	<b>14000</b> MPa	ISO 178
Flexural stress @ break	<b>280</b> MPa	ISO 178
Charpy notched impact strength @ 23°C	<b>10</b> kJ/m²	ISO 179/1eA
Charpy notched impact strength @ -30°C	<b>10</b> kJ/m²	ISO 179/1eA
Thermal properties	Value Unit	Test Standard
Melting temperature (10°C/min)	<b>280</b> °C	ISO 11357-1,-2,-3
Glass transition temperature (10°C/min)	<b>90</b> °C	ISO 11357-1,-2,-3
Flammability @1.6mm nom. thickn.	V-0 class	UL94
thickness tested (1.6)	<b>1.5</b> mm	UL94
Flammability at thickness h	V-0 class	UL94
thickness tested (h)	<b>0.38</b> mm	UL94
, ,		
Test specimen production	Value Unit	Test Standard
Injection molding melt temperature	<b>310 - 340</b> °C	ISO 294

## <u>Disclaimer</u>

Injection molding mold temperature

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values. Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed (+49 (0) 69 30516299 for Europe and +1 859-372-3244 for the Americas) for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products. The products mentioned herein are not intended for use in medical or dental implants

© Copyright 2007, Ticona, all rights reserved. (Pub. 26-Jan-2009)