

FORTRON® 4332L6 | PPS | Mineral / Glass Reinforced

Description

Fortron 4332L6 is a glass fiber/mineral filled injection molding grade, which is intended for applications requiring improved tensile and flexural properties, when compared to other GF/MIN reinforced PPS grades. The recommended processing parameters are similar to the standard grades.

Physical properties	Value	Unit	Test Standard
Density	1950	kg/m ³	ISO 1183
Mold shrinkage - parallel	0.2 - 0.6	%	ISO 294-4
Mold shrinkage - normal	0.3 - 0.7	%	ISO 294-4
Water absorption (23°C-sat)	0.02	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	21500	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	160	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	1.2	%	ISO 527-2/1A
Flexural modulus (23°C)	21000	MPa	ISO 178
Flexural strength (23°C)	260	MPa	ISO 178
Charpy impact strength @ 23°C	30.0	kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	10.0	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
DTUL @ 1.8 MPa	270	°C	ISO 75-1/-2
DTUL @ 8.0 MPa	220	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	0.12	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	0.53	E-4/°C	ISO 11359-2

Injection Molding

On injection molding machines with 15-25 D long three-section screws, as are usual in the trade, the FORTRON is processable. A shut-off nozzle is preferred to a free-flow nozzle.

Melt temperature 320-340 degC
Mold wall temperature at least 140 degC

A medium injection rate is normally preferred. All mold cavities must be effectively vented.

Contact Information

Americas

Ticona North American Headquarters
Product Information Service
8040 Dixie Highway
Florence, KY 41042
USA
Tel.: +1-800-833-4882
Tel.: +1-859-372-3244
email: prodinfo@ticona.com
Ticona on the web: www.ticona.com

Europe

Ticona GmbH
Information Service
Tel.: +49 (0) 180-5842662 (Germany)
+49 (0) 69-30516299 (Europe)
Fax: +49 (0) 180-2021202 (Germany & Europe)
email: infoservice@ticona.de
Internet: www.ticona.com

FORTRON® 4332L6 | PPS | Mineral / Glass Reinforced

Customer Service

Tel.: +1-800-526-4960

Tel.: +1-859-372-3214

Fax: +1-859-372-3125

General Disclaimer

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-September-2013)