CALIBRE™ 302EP-35
Polycarbonate Resin

Overview

CALIBRE™ 302EP-35 is a high flow, UV stabilized polycarbonate resin with excellent heat resistance and optical clarity.

Main Characteristics

- High Flow
- UV Stabilized
- High Heat Resistance

Applications

- Film

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.19	g/cm³	1.19	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	35	g/10 min	35	g/10 min	ASTM D1238
Molding Shrinkage - Flow	5.0E-3 to 7.0E-3	in/in	0.50 to 0.70	%	ASTM D955
Water Absorption					ASTM D570
24 hr, 73°F (23°C)	0.15	%	0.15	%	
Equilibrium, 73°F (23°C), 50% RH	0.32	%	0.32	%	
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength [1]					ASTM D638
Yield	9000	psi	62.1	MPa	
Break	7000	psi	48.3	MPa	
Tensile Elongation [1]					ASTM D638
Yield	5.7	%	5.7	%	
Break	81	%	81	%	
Flexural Modulus [2]	356000	psi	2450	MPa	ASTM D790
Flexural Strength [2]	13900	psi	95.8	MPa	ASTM D790
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact (73°F (23°C))	12	ft·lb/in	640	J/m	ASTM D256
Instrumented Dart Impact [3]					ASTM D3763
73°F (23°C), Total Energy	550	in·lb	62.1	J	
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Rockwell Hardness (R-Scale)	122		122		ASTM D785
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed	278	°F	137	°C	
264 psi (1.8 MPa), Unannealed	251	°F	122	°C	
Vicat Softening Temperature	295	°F	146	°C	ASTM D1525 [4]
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Transmittance (39.4 mil (1000 µm))	89.0	%	89.0	%	ASTM D1003
Haze (39.4 mil (1000 µm))	0.600	%	0.600	%	ASTM D1003

塑料专家 www.ponci.com.cn/wxb/ +13538586433 +18816996168

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] 2.0 in/min (50 mm/min)

[2] 0.079 in/min (2.0 mm/min)

[3] 11.1 ft/sec (3.39 m/sec)

[4] Rate A (50°C/h), Loading 2 (50 N)

塑料专家 www.ponci.com.cn/wxb/ +13538586433 +18816996168

PRODUCT STEWARDSHIP

Trinseo and its affiliated companies have a fundamental concern for all who make, distribute, and use their products and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products so that appropriate steps may be taken to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Trinseo products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

CUSTOMER NOTICE

Customers are responsible for reviewing their manufacturing processes and their applications of Trinseo products from the standpoint of human health and environmental quality to ensure that Trinseo products are not used in ways for which they are not suitable. Trinseo personnel are available to answer questions and to provide reasonable technical support. Trinseo product literature, including safety data sheets, should be consulted prior to the use of Trinseo products. Current safety data sheets are available from Trinseo.

No freedom from infringement of any patent owned by Trinseo or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the customer is responsible for determining whether products and the information in this document are appropriate for the customer's use and for ensuring that the customer's workplace and disposal practices are in compliance with applicable legal requirements. Although the information herein is provided in good faith and was believed to be accurate when prepared, Trinseo assumes no obligation or liability for the information in this document.

DISCLAIMER

TRINSEO MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, IN THIS DOCUMENT; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE (INCLUDING MEDICAL APPLICATIONS) ARE EXPRESSLY EXCLUDED. SINCE THE CONDITIONS AND METHODS OF USE OF THE INFORMATION AND PRODUCTS REFERRED TO ARE BEYOND TRINSEO'S KNOWLEDGE AND CONTROL, TRINSEO DISCLAIMS ANY AND ALL LIABILITY FOR LOSSES OR DAMAGES THAT MAY RESULT FROM RELIANCE ON THE INFORMATION OR USE OF THE PRODUCTS DESCRIBED HEREIN. TRINSEO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, THAT THE USE OF ANY TRINSEO PRODUCT WILL BE FREE FROM ANY INFRINGEMENT CLAIMS.

GENERAL NOTICE

Any photographs of end-use applications in this document represent potential end-use applications but do not necessarily represent current commercial applications, nor do they represent an endorsement by Trinseo of the actual products. Further, these photographs are for illustration purposes only and do not reflect either an endorsement or sponsorship of any other manufacturer for a specific potential end-use product or application, or for Trinseo, or for specific products manufactured by Trinseo.If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Trinseo to change specifications and/or discontinue production, and (4) although Trinseo may from time to time provide samples of such products, Trinseo is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.

Copyright ©Trinseo (2019) All rights reserved.
™Trademark of Trinseo S.A. or its affiliates
®Responsible Care is a service mark of the American Chemistry Council

Follow us at:

塑料专家 www.ponci.com.cn/wxb/ +13538586433 +18816996168