Teldene® R40MLT-MG Lyondellbasell licensed Spheripol Process

Polypropylene Random Copolymer for Healthcare Applications

Technical Data Sheet

Product Description

NATPET polypropylene grades for healthcare applications are produced under controlled conditions to ensure consistent quality and contamination free resins.

R40MLT-MG is highly transparent random copolymer resin containing anti-static agent. Produced using Spheripol® technology, this grade is a reactor grade (non-visbroken) with an exceptional advantage of having morphologically uniform resins, and intrinsically organoleptic-neutral (odorless) character. The ultra clear nucleation additive package also ensure excellent dimensional stability and potential for energy and cycle time savings. The high flow ability renders the grade suitable for thin walled injection molding application.

Without exception, all potential activities for applications of this grade in the healthcare area have to be discussed with the relevant technical and business representative of *NATPET*.

NATPET prohibits the use of this product in an implantable device that is introduced into the human body by surgical intervention and is intended to remain in place following surgical procedure.

Processing Method

Injection Molding, TWIM

Resin	*Conditions*	*Method*	*Value*	*Unit*
Density	23°C	ISO 1183	*0.900*	g/cm^3
Melt Flow Rate (MFR)	230°C/2.16 kg	ASTM D 1238-13	*40*	g/10-min
Mechanical				
Flexural Modulus		ISO 178	*1,100*	MPa
Tensile Modulus	1-mm/min	ISO 527	*1,000*	MPa
Tensile Stress at Yield	50-mm/min	ISO 527	29	MPa
Tensile Strain at Break	50-mm/min	ISO 527	> 50	%
Tensile Strain at Yield	50-mm/min	ISO 527	*12*	%
Izod *Notched*	23°C	ISO 180	*5.4*	kJ/m^2
Thermal				
Heat Deflection Temperature	0.45 MPa Un-annealed	ISO 75B	*73*	°C
Vicat Softening Temperature	A50 (50°C/h 10N)	ISO 306	*125*	°C
Optical				
Haze	1.0 mm	ASTM D 1003	*6.0*	%

Technical information

Note: The above are typical data representing the product; not to be construed as analysis certificate or specifications.

For further details about ***NATPET*** and its products, please visit the website at www.natpet.com

Teldene® R40MLT-MG Lyondellbasell licensed Spheripol Process

Polypropylene Random Copolymer for Healthcare Applications

POLYPROPYLENE RANDOM COPOLYMER

Technical Data Sheet

Special Features

- Amazing result on transparent articles
- Shows broad processing window while providing excellent clarity at low molding temperature
- Energy saving
- Tested for biocompatibility, ISO 10993 (Biological Evaluation of Medical Devices). Refer RCPD

Processing Conditions

Average extruder temperature range may be kept between 190 - 210°C.

Food Regulation

This product is defined as a preparation under specific food contact regulation. Detailed information will be provided in a relevant document "Regulatory Compliances Product Declaration (RCPD)" upon request.

Storage and Handling

If the resin is stored under adverse conditions, i.e. if there are large fluctuations in ambient temperature and the atmospheric humidity is high, moisture may condense inside the packaging. Under these circumstances, it is recommended to dry the resin before use. Unfavorable storage conditions may also intensify the resin´s slight characteristic odor.
Polypropylene resin should be stored to prevent a direct exposure to sunlight (UV) and heat. Improper storage can initiate degradation. Therefore the resin must be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. The resin can be stored over a period of more than 6 month without significant changes in the specified properties, appropriate storage conditions provided. Higher storage temperatures reduce the storage time. Please refer to Safety Data Sheet (SDS) for handling and storage information.

Documents

Specific documents MSDS and RCPD are available on request. Please send your request to the following e-mail: pa@natpet.com or visit our website : WWW.natpet.com

Disclaimer

Before using this product users should make their own independent determination that the product is suitable for the intendeduse and can be used safely and legally. NATPET MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

This product may not be used in: (i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application; or (ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA C lass II Medical Devices; Health Canada Class II or Class III Medical Devices; European Union Class II Medical Devices; film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; and tobacco related products and applications. Additionally, the product may not be used in: (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices; (ii) applications involving permanent implantation into the body; (iii) life sustaining medical applications; and (iv) lead, asbestos or MTBE related applications. All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.