

Description

Polypropylene PPC 11812 has been developed for high speed injection moulding of thin walled packaging containers requiring top level impact resistance at cold temperature (-20°C). It is characterized by a high Melt Flow Index of 50 g/10 min, and allows an optimization of the injection parameters as for example a reduction of the cycle time, while keeping properties even at cold temperature (impact).

Characteristics

	Method	Unit	Typical Value
Rheological properties			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	50
Mechanical properties			
Tensile Strength at Yield	ISO 527-2	MPa	24
Elongation at Yield	ISO 527-2	%	5
Tensile modulus	ISO 527-2	MPa	1150
Flexural modulus	ISO 178	MPa	1100
Izod Impact Strength (notched)	ISO 180	kJ/m ²	
at 23°C			13.5
at -20°C			6.5
Thermal properties			
Melting Point	ISO 3146	°C	165
Vicat Softening Point	ISO 306	°C	
50N-50°C per hour			70
10N-50°C per hour			140
Heat Deflection Temperature	ISO 752	°C	
1.80 MPa - 120°C per hour			48
0.45 MPa - 120°C per hour			90
Other physical properties			
Density	ISO 1183	g/cm ³	0.905
Bulk Density	ISO 1183	g/cm ³	0.525

Handling and storage

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website: <http://www.totalrefiningchemicals.com>

An Injection Moulding troubleshooting guide is available upon request.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within Total Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.

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CERTIFICATE N° 35977

Feluy, July 23, 2015

POLYPROPYLENE PPC 11812 grade as produced in Europe**STATEMENT OF COMPLIANCE FOR FOOD CONTACT APPLICATIONS IN EUROPE :****1. Commission Regulation (EU) N°10/2011**

We confirm that the above-mentioned Product fulfills the harmonized requirements on plastic materials and articles intended to come into contact with food as described in the Regulation (EU) 10/2011 amended up to the Regulation (EU) 2015/174 and its application into national laws

in Belgium :

- Arrêté Royal du 10/02/2011 amending l'Arrêté Royal du 03/07/2005.

in France :

- Arrêté du 01/04/2011 modifiant l'Arrêté du 02/01/2003

- Brochure n° 1227- édition: 15/07/2002.

in Germany :

- Bedarfsgegenständeverordnung in der Fassung vom 23. Dezember 1997 (BGBl. I 1998 S. 5), zuletzt geändert durch Art. 1 der Verordnung vom 24. Juni 2013 (BGBl. I S. 1682).

in Italy :

- Decreto Ministeriale 21/ 03/1973 and amended by Decreto Ministeriale 26/04/1993, n°220 and following updates (last update Decree of the ministry of Health of 16/02/2011).

in the Netherlands :

- Verpakkingen- en gebruiksartikelenbesluit (Warenwet) - Deel A, Hoofdstuk 1 : Kunststoffen, VGB, 39e suppl., December 2013.

in Spain :

- Real Decreto 103/2009 de 06/02/2009 modifying R.D. 866/2008.

- Real Decreto 847/2011, de 17/06/2011.

in the United Kingdom :

- The Plastic Materials and Articles in Contact with Food Regulations - 2012

- England: Statutory Instruments 2012/2619

- Northern Ireland: Statutory Rules of Northern Ireland 2012/384

- Scotland: Scottish Statutory Instruments 2012/318

- Wales: Welsh Statutory Instruments 2012/2705 (W.291)

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POLYPROPYLENE PPC 11812 grade as produced in Europe**Restrictions and/or migration limits:**

This Product contains one or more intentionally added substances with a specific migration limit and/or restrictions defined in Regulation 10/2011/EU.

Experimental tests and/or theoretical calculation for migration carried out on the above mentioned Product (or a specimen representative of this material) covering long term storage at room temperature or below, including heating up to 70 °C for up to 2 hours, or heating up to 100°C for up to 15 minutes with all types of food (Single use, polymer used at 100% and thickness 250 µm) have shown that the overall and if relevant the specific migration limit was not exceeded with all food types

For other specific conditions of use, not covered above, it pertains to downstream users to check by appropriate overall and/or specific migration tests on the final material or article the suitability for contact with different food-types and various end-use conditions. However these are beyond the control of TOTAL RESEARCH & TECHNOLOGY FELUY and are a part of the responsibility of the user of the above-mentioned Product.

We shall supply the TOTAL REFINING & CHEMICALS proprietary information needed to perform the migration measurements/analyses upon request.
For obtaining more information, please send directly an e-mail to: rc.fer-regaffairs@total.com

Dual use additive :

We inform you that the above-mentioned Product contains one or more substance(s) defined as 'dual use additive(s)'. The downstream user must contact us for additional information and you must inform the downstream user accordingly.

NIAS

Total is well aware of the legal requirements of Regulation 1935/2004/EC and 10/2011/EU, namely materials and articles coming into contact with food shall be manufactured so that they do not transfer their constituents to food in quantities that could endanger human health or bring about unacceptable change to the composition of the food. This does not only include constituents which are intentionally added but also non-intentionally added substances (NIAS)

2. Regulation (EC) N°1935/2004 of the European Parliament & of the Council (Framework Regulation)

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We hereby confirm that the above-mentioned Product, when used under normal or foreseeable conditions of use, is expected to meet the relevant requirements laid down in Regulation 1935/2004/EC.

Moreover we inform you that the organoleptic properties are influenced by the conditions of use e.g temperature, type of packaged foodstuff, storage conditions. Consequently the packaging has to be controlled by the downstream user following the specific end-use conditions of use.

3. Commission Regulation (EC) N° 2023/2006 (GMP)

We inform you that the production of the above-mentioned Product is systematically reviewed with regards to good manufacturing practice (GMP) using our ISO 9001 System, and following the Plastics Europe guideline specifically dedicated to GMP. Therefore we can state that the above-mentioned Product meets the relevant requirements laid down in Commission Regulation (EC) 2023/2006.

DISCLAIMER:

Our certificate is only valid for as far as above mentioned Product was bought from Total or its distributor and does not cover:

- Any modification of the above-mentioned Product by any addition of any other product or ingredient to it;
- Any prejudicial modification of the above-mentioned Product resulting from a processing of it;
- An inadequate use and/or storage of the above-mentioned Product and/or of the finished articles.

Unless specifically indicated in a regulatory certificate of compliance, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. Under no circumstances are any products sold by Total Refining & Chemicals suitable for human or animal in the following applications: (i) implantable devices intended for human or animal body (ii) Devices intended to be used in contact with internal body fluids (iii) Devices intended to be used in contact with internal body tissues.

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The information in this document is, to the best of our knowledge, true and accurate at the time and date of issue.

However, information in this document may be updated periodically; therefore we cannot guarantee that the status of this product will remain unchanged. Users are expected to regularly visit our Website to obtain the most up to date information on this product.

TOTAL RESEARCH & TECHNOLOGY FELUY

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