Polypropylene PPR 7220

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For other Regulations, please consult our Product Stewardship Certificate available on this website. We have included in our Polypropylene Product Stewardship Certificate the conformity to a number of regulations whenever it could be certified for all our European polypropylene products.

In case you might need additional technical or regulatory information, please contact your sales representative.
Polypropylene PPR 7220

Description
Total Petrochemicals PPR 7220 is a nucleated random copolymer polypropylene with a Melt Flow Index of 10 g/min for the injection moulding of articles with high transparency and excellent surface appearance.

Polypropylene PPR 7220 is intended for general purpose, household goods, cosmetic caps and closures.

Characteristics

<table>
<thead>
<tr>
<th>Method</th>
<th>Unit</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rheological properties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melt Flow Index 230°C/2.16 kg</td>
<td>ISO 1133</td>
<td>g/10 min 10</td>
</tr>
<tr>
<td><strong>Mechanical properties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Strength at Yield</td>
<td>ISO 527-2</td>
<td>MPa 29</td>
</tr>
<tr>
<td>Elongation at Yield</td>
<td>ISO 527-2</td>
<td>% 10</td>
</tr>
<tr>
<td>Tensile modulus</td>
<td>ISO 527-2</td>
<td>MPa 1300</td>
</tr>
<tr>
<td>Flexural modulus</td>
<td>ISO 178</td>
<td>MPa 1200</td>
</tr>
<tr>
<td>Izod Impact Strength (notched) at 23°C</td>
<td>ISO 180</td>
<td>kJ/m² 5.5</td>
</tr>
<tr>
<td>Charpy Impact Strength (notched) at 23°C</td>
<td>ISO 179</td>
<td>kJ/m² 7</td>
</tr>
<tr>
<td>Hardness Rockwell - R-scale</td>
<td>ISO 2039-2</td>
<td></td>
</tr>
<tr>
<td><strong>Thermal properties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point</td>
<td>ISO 3146</td>
<td>°C 146</td>
</tr>
<tr>
<td>Vicat Softening Point</td>
<td>ISO 306</td>
<td>°C 67</td>
</tr>
<tr>
<td>50N-50°C per hour</td>
<td></td>
<td>130</td>
</tr>
<tr>
<td>10N-50°C per hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other physical properties</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>ISO 1183</td>
<td>g/cm³ 0.902</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>ISO 1183</td>
<td>g/cm³ 0.525</td>
</tr>
</tbody>
</table>

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: www.totalpetrochemicals.biz

An Injection Moulding troubleshooting guide is available upon request.
Feluy, December 7, 2009

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1. STATEMENT OF COMPLIANCE FOR FOOD CONTACT APPLICATIONS:

1.1 PLASTICS DIRECTIVE

We confirm that the above-mentioned Product fulfils the harmonized requirements on materials used for articles or components of articles intended to come into contact with food as described in the European Directive 2002/72/EC amended by Directives 2004/1/EC, 2004/19/EC, 2005/79/EC, 2007/19/EC, 2008/39/EC and by the Regulation 975/2009/EC and its transposition and/or application into national laws as incorporated in the following food contact regulations:

in Belgium:
- Arrêté Royal du 03/07/2005 concernant les matériaux et objets destinés à entrer en contact avec les denrées alimentaires (Moniteur Belge du 29/07/2005).

in France:
- Décret Ministériel n° 73-138 du 12/02/73 et n° 2007-766 du 10/05/2007 ainsi que les lettres circulaires de la Répression des Fraudes et contrôle de la qualité (Recueil de textes: brochure n° 1227 "Matériaux au contact des aliments et denrées destinées à l'alimentation humaine" - édition : 15/07/2002);
- Instruction relative à l’emploi d’additifs dans les matières plastiques au contact des denrées alimentaires (Bulletin Officiel de la concurrence, de la consommation et de la répression des fraudes du 11/08/93);
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in Germany:

in Italy:

in the Netherlands:
- Verpakkingen- en gebruiksartikelenbesluit (Warenwet) - Deel A. Hoofdstuk 1: Kunststoffen, VGB, 28e suppl., Juni 2009.

in Spain:
- Orden SCO/983/2003 de 15 de abril (B.O.E. n° 99 de 25/04/2003),

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. Under no circumstances are any products sold by Total Petrochemicals suitable for human or animal implants.

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**CERTIFICATE N° 33712**

Feluy, December 7, 2009

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in the United kingdom:
- The Plastic Materials and Articles in Contact with Food Regulations - 2008
- England: Statutory Instruments 2008/916
- Northern Ireland: Statutory Rules 2008/167
- Scotland: Statutory Instruments 2008/127
- Wales: Statutory Instruments 2008/1237 (W.124)

**Conditions:**

- **Overall Migration Limit:**

  According to Directive 82/711/EEC (and its amendments 93/8/EEC and 97/48/EEC), 85/572/EEC and 2002/72/EC, the overall migration limit, for which a maximum value of 10 mg/dm2 or 60 mg/kg is set (Directive 2002/72/EC, article 2), has to be controlled on the finished articles intended to come into contact with foodstuffs; consequently it is the responsibility of the end-user of the above-mentioned Product.

  Moreover we inform you that the overall migration result is influenced by the conditions of use e.g. temperature, type of packaged foodstuff (fatty food or aqueous food). Consequently the packaging has to be controlled following the specific end-use conditions of use as described in Directives 82/711/EEC and 85/572/EEC.

- **Specific Migration Limit(s) and/or other restrictions:**
  1. Restriction for Monomer \(^a\): none
  2. Restriction for Additive(s) \(^b\):

  It pertains also to end-users to check by appropriate 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 PETROCHEMICALS RESEARCH FELUY and are a part of the responsibility of the user of the above-mentioned Product.

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Moreover we inform you that the specific migration result is influenced by the conditions of use e.g. temperature, type of packaged foodstuff (fatty food or aqueous food). Consequently the packaging has to be controlled following the specific end-use conditions of use as described in Directives 82/711/EEC and 85/572/EEC.

- Dual use additive (2004/19/EC):

We inform you that the above-mentioned Product contains one or more food additive(s) authorized and subject of a use restriction in food under Consolidated Directive 95/2/EC. The end-user must contact us for additional information and you must inform the end-user accordingly.

1.2 REGULATION 1935/2004/EC (Framework Regulation)

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

1.3 REGULATION 2023/2006/EC (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 Regulation 2023/2006/EC.

2. STATEMENT OF COMPLIANCE FOR FOOD CONTACT IN THE UNITED STATES OF AMERICA:

- Code of Federal Regulations Food and Drugs Title 21 (2009) §177.1520: Olefins Polymers; For PPC: §177.1520 (a) (3) (i) and (c) 3.1a. This product meets the criteria in § 176.170(c), with types of food I through IX of Table 1, under conditions of use C through G described in the table 2.

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GENERAL USE CONDITIONS (FOOD CONTACT):

It pertains to end-users of materials intended to come into contact with food, to ensure that the material does not bring about an unacceptable change in the composition of the food, or bring about a deterioration in the organoleptic characteristics which render it unfit.


We hereby confirm that the above-mentioned Product meets the relevant requirements of European Standards EN 71-3 1994, its amendment EN 71-3/ A1 2000, its corrigendum AC: 2002 entitled "Safety of Toys - Part 3 : Migration of certain elements" and EN 71-9, September 2005 “Organic chemical compounds - requirements”.

The above-mentioned Product meets this standard because every time analyses were performed on this product, results were below the prescribed limits.

4. STATEMENT ON NO COMPLIANCE WITH EUROPEAN PHARMACOPOEIA:

We DO NOT certify that the above-mentioned product would comply with the European pharmacopoeia.

5. STATEMENT ON NO COMPLIANCE WITH UNITED STATES PHARMACOPOEIA:

The above-mentioned Product is NOT in compliance with the US pharmacopoeia because we DID NOT perform the required tests.

6. STATEMENT ON NO COMPLIANCE WITH CANADIAN PHARMACOPOEIA:

The above-mentioned Product has NOT a DMF in Canada.

For obtaining more information regarding the Pharmacopoeia and DMF, please contact directly our ATC (Phone : +32.64.51.43.83, Fax : +32.64.51.46.50) or our vendor.

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7. STATEMENT ON TRANSMISSIBLE BOVINE SPONGIFORM ENCEPHALOPATHY (BSE):

Our suppliers provided us with documents addressing potential BSE/TSE concerns for additives which might be used in the above-mentioned Product and may themselves be derived from tallow/lard, or contain components derived from tallow/lard (tallow derivatives). Based on our supplier documentation and/or our own evaluation, we can confirm the following:

1) While Regulation (EC) No 999/2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies (TSE) does not apply to components of packaging materials, we can confirm that none of the components potentially present in the above-mentioned Product qualify as Specified Risk Materials (SRMs) under said Regulation.

2) While Regulation (EC) No 1774/2002 laying down health rules concerning animal by-products not intended for human consumption does not apply to tallow derivative components themselves, which do not qualify as animal by-products subject to the Regulation, we can confirm that any animal by-product used to manufacture the tallow from which tallow derivative components in the above-mentioned Product are derived are exclusively Category 3 materials processed in compliance with said Regulation.

3) The tallow derivatives potentially present in the above-mentioned Product comply with the requirements of Section 6-4 ("Tallow derivatives") of Chapter 5.2.8 of the European Pharmacopoeia ("Minimising the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medicinal Products") and the guidance document baring the same name issued by the European Medicines Agency (EMEA/410/01 Rev2 – October 2003) and given the force of law by Directives 2001/82/EC and 2001/83/EC. We note that European Pharmacopoeia Chapter 5.2.8 is identical to the EMEA guidance document.

8. STATEMENT ON GENETICALLY MODIFIED ORGANISMS (GMO).

We hereby confirm that we did receive an indication from our current additive suppliers.

- 1) The majority of additives b) used in the above-mentioned Product are not GMO derived
- 2) Whilst the others derive from Genetically Modified Organism (GMO).

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9. STATEMENT ON INVENTORIES:

We declare that the monomers a) and, if present, the additives b) of the above-mentioned Product are listed or exempted from listing on the inventories of the following countries:
- Australia: AICS (Australian Inventory of Chemical Substances)
- Canada: DSL (Domestic Substances List)
- China: IECSC (Inventory of Existing Chemical Substances Manufactured or Imported in China)
- Europe: EINECS AND/OR ELINCS (Replaced by REACH)
- Korea: KECL (Korean Existing Chemicals List)
- The Philippines: PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- United States: TSCA (Toxics Substances Control Act Inventory)

NOTE:

a) Monomer as defined in the EC Directive 2002/72/EC and its amendments up to Regulation 975/2009/EC.
b) Additive as defined in the EC Directive 2002/72/EC and its amendments up to Regulation 975/2009/EC.

DISCLAIMER:

Our certificate 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.
Feluy, December 7, 2009

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The present certificate is valid for a period of one year starting from the date first above written. Upon the expiration of this certificate, we can issue a new one at your request. In case of change during this period a new certificate will be issued automatically; kindly forward it to any recipient of the present certificate.

TOTAL PETROCHEMICALS RESEARCH FELUY

C. RAIMOND          F. WYLIN
Regulatory Affairs           Regulatory Affairs, Manager

Issued by an electronic system

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