

Lighter injection moulded packaging with PPC 11642, PPC 12642 and PPC 13812 polypropylene

PPC 11642, PPC 12642 and PPC 13812 polypropylene grades are used to manufacture tubs and pots for foodstuffs and industrial products.

5%

The Total Ecosolutions advantage

The properties of these grades enable the reduction in wall thickness of injected parts. This results in a 5% reduction in the weight of moulded parts, which results in material savings compared with the most widely used standard polypropylenes.



Environmental performance

The 5% reduction in material produces a corresponding reduction in energy consumption and greenhouse gas emissions. The use of 1000t of PPC 11642, PPC 12642 or PPC 13812 in this application averts the emission of around 280t of CO₂ equivalent, which corresponds to the average annual emissions of approximately 30 EU citizens*.

* Source: European Environment Agency, October 2010: greenhouse gas emissions in EU 27 for 2008 = 9.9 tons of CO₂ equivalent per capita.

Leveraging innovation to serve continuous improvement, the Total Ecosolutions program involves developing products and services that enable our customers to consume less natural resources and/or reduce their environmental impact.

For any question or to learn more about the Total Ecosolutions program and the products and services that have earned the label, go to: www.total.com/EN/total-ecosolutions

This product is Total Ecosolutions.



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Description

Polypropylene PPC 12642 is a nucleated antistatic heterophasic copolymer with high Melt Flow Index of 70 g/10 min and good mechanical properties.

Polypropylene PPC 12642 has been developed for high speed injection moulding of thin walled packaging containers.

We hereby confirm that we do not use peroxide in the manufacturing of the above-mentioned Product.

Characteristics

	Method	Unit	Typical Value
Rheological properties			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	70
Mechanical properties			
Tensile Strength at Yield	ISO 527-2	MPa	27
Elongation at Yield	ISO 527-2	%	5
Tensile modulus	ISO 527-2	MPa	1600
Flexural modulus	ISO 178	MPa	1500
Izod Impact Strength (notched)	ISO 180	kJ/m ²	
at 23°C			6.5
at -20°C			4
Charpy Impact Strength (notched)	ISO 179	kJ/m ²	
at 23°C			6
at -20°C			4.5
Hardness Rockwell - R-scale	ISO 2039-2		100
Thermal properties			
Melting Point	ISO 3146	°C	165
Vicat Softening Point	ISO 306	°C	
50N-50°C per hour			80
10N-50°C per hour			148
Heat Deflection Temperature	ISO 752	°C	
1.80 MPa - 120°C per hour			55
0.45 MPa - 120°C per hour			100
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.totalpetrochemicals.com>

An Injection Moulding troubleshooting guide is available upon request.

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