SHANGHAI SMART NEW MATERIALS CO., LTD



TECHNICAL DATA SHEET PCR PP RePro™ HM58304

95% Post-Consumer Recycled Polypropylene for thin-wall product.

DESCRIPTION

PCR PP RePro™ HM58304 is a 95% PCR (post-consumer recycled) polypropylene material with a good melt flow rate and good heat resistant, designed for thin-wall injection molding process.

PCR PP RePro™ HM58304 is modified PP made from 100% PCR PP products, including food boxes, water cups and drinking water bottles, these products are manufactured through high quality recycling process, consist of hot washing, melt filtration, pelletization and degassing etc., comply with GRS (Global Recycled Standard) and food contact materials (FCM) regulations.All formula technology belongs to SMART research and development and mass production.

APPLICATIONS

Food Containers Lids Children toys

SPECIAL FEATURES

Lower impurity content control Good Heat Resistant

COMPLIANCE

BPA Free REACH (240 SVHC) Packaging components Water cups Housewares containers

Better MFR suitable for thin-wall injection Stable Quality Control

FDA compliant RoHS Directive (EU) 2011/65

PHYSICAL PROPERTIES

Property

Density Melt Flow Rate (230°C/2.16kg) Tensile Stress (50mm/min) Tensile Modulus(50mm/min) Elongation at break Flexural Modulus Flexural Modulus Flexural Strength Ash Content HDT-0.45MPa Molding Shrinkage Hardness (Shade D) IZOD Impact Strength, notched (23°C) IZOD Impact Strength, unnotched (23°C) Heavy Metals (Rohs)

Typical Value	Test Method
0.902 g/cm ³	ISO 1183
30 g/10min	ISO 1133
32 MPa	ISO 527-2
1590 MPa	ISO 527-2
18%	ISO 527-2
1520 MPa	ISO 178
47 MPa	ISO 178
0.1 %	ISO 3451-1
120 ℃	ISO 75-2
1.55 %	Internal
65	ISO 7619-1
2.5 KJ/m ²	ISO 180
65 KJ/m²	ISO 180
Cd	N.D.
Hg	N.D.
Pb	N.D.
Cr	N.D.

* Data shown above are representative values for reference purposes only, and not to be construed as specifications

PROCESSING CONDITIONS

PCR PP RePro[™] HM58304 is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:Melt temperature:**180 - 210** °CHolding pressure:**200 - 500** barMould pressure:**60-100** MPaMould temperature:**30 - 50** °CMolding time:**30-60** sShrinkage 1.1- 1.5%, depending on wall thickness and moulding parameters

STORAGE

PCR PP RePro™ HM58304 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product. More information on storage can be found in Material Safety Data Sheet (MSDS) for this product.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

DISCLAIMER

This information contained herein is based on the data available to us and is believed be correct. However, SMART makes no warranty, expressed or implied, regarding the accuracy these data or the results to be obtained from the use thereof. Each user of the products shall convince himself through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its particular purpose.

ADDRESS

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