

# Technical Data Sheet

PCR HDPE Regranulate White Color

Product Code: 000620



## Description

**PCR HDPE 000620** is a 100% PCR (post-consumer recycled) high-density polyethylene material designed for injection molding process.

**PCR HDPE 000620** is made from 100% Post consumer water bottle caps. 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).

## Applications

|                 |                      |
|-----------------|----------------------|
| Food containers | Packaging components |
| Lids            | Water cups           |
| Caps            | Houseware containers |

## Special Features

|                                |   |
|--------------------------------|---|
| Lower impurity content control | Stable MFR suitable for injection molding |
|--------------------------------|---|

## Compliance

|                             |                  |
|-----------------------------|------------------|
| RoHS Directive (EU) 2011/65 | REACH (224 SVHC) |
| FDA (Food Safe)             |                  |

| Physical Properties       | Value | Units             | Test Method |
|---------------------------|-------|-------------------|-------------|
| Density                   | 0,94  | g/cm <sup>3</sup> | ISO 1183    |
| MFR (230°C/ 2,16kg)       | 4     | g/10 min          | ISO 1133    |
| Tensile Stress (50mm/min) | 20    | MPa               | ISO 527-2   |

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|  |                |                   |            |
|--|----------------|-------------------|------------|
| Tensile Modulus (50mm/min)               | 700            | MPa               | ISO 527-2  |
| Elongation at Break                      | >120           | %                 | ISO 527-2  |
| Flexural Modulus                         | 745            | MPa               | ISO 178    |
| Flexural Strength                        | 20             | MPa               | ISO 178    |
| Ash Content                              | <1             | %                 | ISO 3451-1 |
| Melt Point                               | 140            | °C                | ISO 11357  |
| Molding Shrinkage                        | 1.55           | %                 | Internal   |
| Charpy Impact Strength, notched (23°C)   | 5.6            | KJ/m <sup>2</sup> | ISO 179    |
| Charpy Impact Strength, unnotched (23°C) | NB             | KJ/m <sup>2</sup> | ISO 180    |
| Heat Deflection Temperature (0,45MPa)    | 65             | °C                | ISO 75-2   |
| Heavy Metals (Rohs)                      | Cd, Hg, Pb, Cr | -                 |            |

### Processing Conditions

**PCR HDPE 000620** is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

Melt temperature: **160 -200 °C**

Holding pressure: **200 – 500 bar**

Mould pressure: **60-100 MPa**

Mould temperature: **30-50 °C**

Molding time: **30-60 s**

Shrinkage 1 - 2%, depending on wall thickness and moulding parameters.

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### Storage

PCR HDPE 000620 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odor generation and color changes and can have negative effects on the physical properties of 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.

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