

## TECHNICAL DATA SHEET

# FullCycle™ PCR PP

## SMR1202 (Natural color, food grade)

100% Post-Consumer Recycled Polypropylene For Extrusion, Blowing Molding Process.

### DESCRIPTION

**PCR PP SMR1202** is a 100% PCR (post-consumer recycled) polypropylene material with a low melt flow rate and good impact resistance, designed for extrusion (blowing) molding process.

**PCR PP SMR1202** is made from 100% PCR juice 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.

### APPLICATIONS

Food Containers  
Tubes

EBM bottles  
Straws

### SPECIAL FEATURES

Lower impurity content control

High glossiness and low haze

### COMPLIANCE

BPA Free  
REACH (224 SVHC)  
California Prop. 65  
EU Regulations EC No 1935/2004 & EU No 10/2011

FDA compliant  
RoHS Directive (EU) 2011/65  
TPCH

### PHYSICAL PROPERTIES

#### Property

Density  
Melt Flow Rate (230°C/2.16kg)  
Tensile Stress (50mm/min)  
Elongation at break  
Flexural Modulus  
Flexural Strength  
Ash Content  
Melt Point  
Molding Shrinkage  
Charpy Impact Strength, notched (23°C)  
Heat Deflection Temperature(0,45MPa)  
Heavy Metals (RoHs)

#### Typical Value

**0.90** g/cm<sup>3</sup>  
**3** g/10min  
**20** MPa  
**>120%**  
**720** MPa  
**23** MPa  
**0.15** %  
**160** °C  
**1.6** %  
**12** KJ/m<sup>2</sup>  
**70** °C  
**Cd**  
**Hg**  
**Pb**  
**Cr**

#### Test Method

ISO 1183  
ISO 1133  
ISO 527-2  
ISO 527-2  
ISO 178  
ISO 178  
ISO 3451-1  
ISO 11357  
Internal  
ISO 180  
ISO 75-2  
N.D.  
N.D.  
N.D.  
N.D.

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

## PROCESSING CONDITIONS

**PCR PP SMR1202** is easy to process with standard extrusion blowing moulding machines.

Following parameters should be used as guidelines:

Melt temperature: **180 - 210 °C**

Holding pressure: **200 - 500 bar**

Mould pressure: **60-100 MPa**

Mould temperature: **30 - 50 °C**

Molding time: **20-60 s**

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

## STORAGE

**PCR PP SMR1202** 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 to be correct. However, SmartLoop makes no warranty, expressed or implied, regarding the accuracy of 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

Shanghai SmartLoop Industrial Co., Ltd

Addr.: 19B, No.985 Dongfang Road, Pudong District, Shanghai, China, 200122

Tel: +86 21 6314 9892

Email: [info@smartloop.com.cn](mailto:info@smartloop.com.cn)