

TECHNICAL DATA SHEET (TDS)

FullCycle™ PCR HDPE SMR1101

100% PCR HDPE, natural color, food grade for extrusion and blowing molding.

DESCRIPTION

FullCycle™ PCR HDPE SMR1101 is a 100% Post-consumer recycled (PCR) HDPE resin. It uses 100% milk, juice and sauce bottles as the raw materials. They are produced by sorting, regrinding, cold wash, hot wash, flakes sorting, melting, filter and extrusion, pelletization and odor removal processes. The product complies with GRS (Global Recycled Standard) and FCM (food contact materials) requirements.

PROPERTIES

Item	Typical Value	UoM	Standard
Density	0.94-0.95	g/m³	ISO 1183
MFI (190°C, 2.16kg)	0.25-0.50	g/10min	ISO 1133-1
Tensile Strength	26	MPa	ISO 527-2, 50mm/min
Elongation at Break	> 600	%	ISO 527-2, 50mm/min
Flexural Strength	25	MPa	ISO 178, 2mm/min
Flexural Modulus	960	MPa	ISO 178, 2mm/min
Charpy Impact Strength-Notched	36	KJ/m²	ISO 180
Charpy Impact Strength- Unnotched	100	KJ/m²	ISO 180
Heat Deflection Temperature	75	°C	ISO 75-2, 0.45MPa
Melting Point	130	°C	ISO 11357
Mesh Size	150	mesh	3 layers
Moisture content	< 0.2	%	ISO 15512-2014
Ash content	< 0.2	%	ISO 3451-1, 800°C

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

APPLICATIONS

Food containers
Tubes

EBM bottles
Films

COMPLIANCE

FDA
REACH (240 SVHC)

EU10/2011
RoHS Directive (EU) 2011/65

PRODUCTS FEATURES

Easy for extrusion
Stable mechanical performance

Low impurities

PACKING

Jumbo bags, 800KG/bag.
Trial samples, 25KG/bag.

PICTURE



PROCESSING CONDITIONS

FullCycle™ PCR HDPE SMR1101 typically do not need to be dried before use. Processing temperature is 160~200°C.

STORAGE

FullCycle™ PCR HDPE SMR1101 should be stored in room temperature with dry condition. Improper storage can cause the resins degradation and quality issues of the final products. For more details, please refer to the MSDS or contact your sales representative.

DISCLAIMER

All data generated by SmartLoop lab team, SmartLoop reserves the rights to update this document without notifications.

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