

## Technical Data Sheet

### *Circulen*Recover HD5404 Grey



High Density Polyethylene

#### Product Description

*Circulen*Recover HD5404 Grey is a circular high density polyethylene grade supplied in pellet form for extrusion applications. This grade is characterized by its easy processing.

#### Sustainability

According with the requirements of Standard ISO 14021:2016, *Circulen*Recover HD5404 Grey contains at least 98% of recycled material that is fully based on Post-Consumer Waste (PCW) from pre-sorted municipal plastic waste. Filtration level is 150 µm. Volatiles according to ASTM D6980 @ 120 °C are < 0.2%. Based on CIELab values, the color indication is close to RAL 7012.

This product is not intended for highly regulated applications including food contact, potable water contact, medical and pharmaceutical applications.

<b>Application</b>	Drainage Pipe; General Sheet Extrusion; Soil & Waste Pipe
<b>Market</b>	Pipe
<b>Processing Method</b>	Pipe; Sheet and Profile Extrusion
<b>Attribute</b>	Antioxidant; General Purpose; High Rigidity

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate			
(190 °C/2.16 kg)	0.40	g/10 min	ISO 1133-1
(190 °C/5.0 kg)	1.9	g/10 min	ISO 1133-1
Melt Volume Flow Rate, (230 °C/2.16 kg)	0.52	cm <sup>3</sup> /10 min	ISO 1133-1
Density	0.954	g/cm <sup>3</sup>	ISO 1183-1
Bulk Density	> 0.500	g/cm <sup>3</sup>	ISO 60
<b>Mechanical</b>			
Tensile Modulus	1100	MPa	ISO 527-1, -2
Tensile Stress at Yield	23	MPa	ISO 527-1, -2
Tensile Strain at Yield	9	%	ISO 527-1, -2
FNCT, (6.0 MPa, 2% Arkopal N100, 50 °C)	6	hr	ISO 16770
<b>Impact</b>			
Charpy Impact Strength - Notched, (-30 °C, Type 1, Edgewise, Notch A)	2.2	kJ/m <sup>2</sup>	ISO 179
<b>Additional Information</b>			
Ash	< 2	wt %	ISO 3451-1
600 °C			
<b>Processing Parameters</b>			
Melt Temperature	180 - 210	°C	