



## Hostalen GM 9310 C black

### Polyethylene, High Density

#### Product Description

**Hostalen GM 9310 C black** is a electrically conductive high density polyethylene (HDPE), black coloured similar RAL 9004 with high melt viscosity for pipes and fittings for application in explosion-proof areas. The product provides good long term hydrostatic strength.

It is not intended for medical, pharmaceutical and food contact applications.

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Processing Methods</b>	Extrusion Pipe Sheet and Semi Finished Products
<b>Typical Customer Applications</b>	Industrial

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	1.0	g/cm <sup>3</sup>
Melt flow rate (MFR) (190°C/21.6kg)	ISO 1133	4.5	g/10 min
Staudinger index Jg	ISO 1628	290	ml/g
<b>Mechanical</b>			
Tensile Modulus (23 °C, v = 1 mm/min, Secant)	ISO 527-1, -2	1250	MPa
Tensile Stress at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	26	MPa
Tensile Strain at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	7	%
Tensile Creep Modulus 1h	ISO 899-1	780 [1.5]	MPa
<i>Note: [Test stress in MPa]</i>			
Flexural stress at 3,5% deflection	ISO 178	24	MPa
Flexural creep modulus (4 point loading method, 1 min-value)	DIN 19537-2	1400	MPa
<b>Impact</b>			
Charpy notched impact strength (23 °C)	ISO 179	5	kJ/m <sup>2</sup>
(-30 °C)		3	kJ/m <sup>2</sup>
<b>Hardness</b>			
Shore hardness (Shore D (3 sec))	ISO 868	66	
Ball indentation hardness H 132/30	ISO 2039	55	MPa
<b>Thermal</b>			
Vicat softening temperature (VST/B/50 K/h (50 N))	ISO 306	83	°C
Oxidation induction time (OIT) (210°C)	ISO 11357-6 / EN 728	20	min
<b>Electrical</b>			
Specific volume resistivity	ASTM D 257/IEC 93	100000	Ohm*cm
Specific surface resistivity	ASTM D 257/IEC 93	10000	Ohm
<i>Note: Measured on compression moulded sheet (120x80x3 mm)</i>			
<b>Additional Information</b>			
Carbon black content	ISO 6964	10	%

#### Additional Properties

Processing:  
 Recommended melt temperatures: 190-220 °C.  
 Recommended injection moulding temperatures: 200-280 °C.

#### Notes

Typical properties; not to be construed as specifications.