



## Lupolen 3621 M RM Black Powder

### Polyethylene, Medium Density

#### Product Description

**Lupolen 3621 M RM Black Powder** is the black compound version of the new generation hexene linear medium-density polyethylene LP 3621 M RM Black for rotational molding of a variety of articles. The product exhibits excellent ESCR, high impact strength at low temperatures and improved UV resistance. **Lupolen 3621 M RM Black Powder** is a fully UV-stabilized polymer. The product is delivered as a powder. Tests have shown that this material is resisting against the harmful effect of biodiesel fuel.\*\*

It is not intended for use in medical and pharmaceutical applications.

\*\* Resistance is based on our latest patented technology

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Availability</b>	Europe, Asia-Pacific, Africa-Middle East
<b>Processing Methods</b>	Rotational Molding
<b>Features</b>	High ESCR (Environmental Stress Cracking Resistance), Low Temperature Impact Resistance, Good Processability, Low Warpage
<b>Typical Customer Applications</b>	Fuel Tanks, Industrial, Technical parts

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.9355*	g/cm <sup>3</sup>
<i>Note: at 23°C</i>			
Melt flow rate (190/2.16)	ISO 1133	7.5	g/10 min
<b>Mechanical</b>			
ESCR	ASTM D 1693	> 1000	h
<i>Note: Condition B</i>			
Tensile Modulus	ISO 527-1, -2	700	MPa
Tensile Stress at Yield	ISO 527-1, -2	17	MPa
Tensile Strain at Yield	ISO 527-1, -2	10	%
Tensile Impact Strength	ISO 8256	104	kJ/m <sup>2</sup>
<i>Note: Notched, type 1, method A, -30 °C</i>			
		213	kJ/m <sup>2</sup>
<i>Note: Notched, type 1, method A, 23 °C</i>			
Tensile Strain at Break	ISO 527-1, -3	>450	%
<b>Thermal</b>			
Vicat softening temperature A/50	ISO 306	113	°C
<b>Additional Information</b>			
Additional Properties			
<i>Note: FNCT (Full notch creep test) acc. ISO 16770 (6.0 MPa, 2% Arkopal N100, 50°C): <b>15 h</b></i>			

#### Additional Properties

Note: \* Density value is given of the base polymer. Final density of the black product is higher due to pigmentation.

Processing: Recommended range for PIAT (Peak Internal Air Temperature) is 180 - 210 °C. PIAT should not exceed 225 °C.

#### Notes

Typical properties; not to be construed as specifications.