

# Lupolen 3621 M RM Black

## Polyethylene, Medium Density

#### **Product Description**

**Lupolen 3621 M RM Black** is the black compound version of the new generation hexene linear medium-density polyethylene LP 3621 M RM 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** is a fully UV-stabilized and pelletized polymer. 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**

Test Method used ISO

Processing Methods Rotational Molding

Features High ESCR (Environmental Stress Cracking Resistance),

Low Temperature Impact Resistance, Good

Processability, Low Warpage

Typical Customer Applications Fuel Tanks, Industrial, Technical parts

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.9355*	g/cm³
Note: at 23°C			
Melt flow rate (190/2.16)	ISO 1133	7.5	g/10 min
Mechanical			
ESCR	ASTM D 1693	> 1000	h
Note: Condition B			
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/m²
Note: Notched, type 1, method A, -30 °C			
		213	kJ/m²
Note: Notched, type 1, method A, 23 °C			
Tensile Strain at Break	ISO 527-1, -3	>450	%
Thermal			
Vicat softening temperature A/50	ISO 306	113	°C
Additional Information			
Additional Properties			
Note: FNCT (Full notch creep test) acc. ISO 167	70 (6.0 MPa, 2% Arko	pal N100, 5	50°C): <b>15 h</b>

### **Additional Properties**

Note:  $\ast$  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.



