Lupolen 4021 K RM Black Powder

Polyethylene, Medium Density

Product Description

***Lupolen* 4021 K RM Black Powder** is the black compound version of the new generation hexene linear medium-density polyethylene LP 4021 K RM for rotational molding. Typical customer applications include large tanks including underground and infrastructure applications. The product exhibits outstanding ESCR combined with high impact at low temperatures and improved UV resistance. ***Lupolen* 4021 K 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

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, Tanks, Industrial

Typical Properties	Method	Value	Unit
Physical			
Density *Note*: at 23°C	ISO 1183	0.9395*	g/cm³
Melt flow rate (190/2.16)	ISO 1133	4,0	g/10 min
Mechanical			
ESCR *Note*: Condition B	ASTM D 1693	> 1000	h
Tensile Stress at Yield	ISO 527-1, -2	19	MPa
Tensile Strain at Yield	ISO 527-1, -2	9	%
Tensile Impact Strength	ISO 8256		
Note: Notched, type 1, method A, -30 °C		120	kJ/m²
Note: Notched, type 1, method A, 23 °C		265	kJ/m²
Tensile Strain at Break	ISO 527-1, -3	>450	%
Tensile modulus	ISO 527	750	MPa
Thermal			
Vicat softening temperature A/50	ISO 306	114	
Additional Information			
Additional Properties *Note*: FNCT (Full notch creep test) acc. ISO 16770 (6.0 MPa, 2% Arkopal N100, 50°C): **50 h**			

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.