



## Lupolen 4021 K RM

### Polyethylene, Medium Density

#### Product Description

**Lupolen 4021 K RM** is a new generation hexene linear medium-density polyethylene for rotomolding. Typical customer applications include large tanks including agricultural and chemical storage containers and underground and infrastructure applications.

**Lupolen 4021 K RM** 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

<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, Heating Oil Tanks, IBCs, Tanks, Industrial

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density <i>Note: at 23°C</i>	ISO 1183	0.9395	g/cm <sup>3</sup>
Melt flow rate (190/2.16)	ISO 1133	4,0	g/10 min
<b>Mechanical</b>			
ESCR <i>Note: Condition B</i>	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  <i>Note: Notched, type 1, method A, -30 °C</i>  <i>Note: Notched, type 1, method A, 23 °C</i>	ISO 8256	120 265	kJ/m <sup>2</sup> kJ/m <sup>2</sup>
Tensile Strain at Break	ISO 527-1, -3	>450	%
Tensile modulus	ISO 527	750	MPa
<b>Thermal</b>			
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

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.