

Description

Characteristics: Lumicene® mPE M3581 UV is a second generation metallocene medium density polyethylene (mMDPE) with hexene as comonomer. Lumicene mPE M3581 UV is a natural grade available in pellet form.

Applications: Lumicene® mPE M3581 UV is intended for the manufacture of rotomolded items. Its specific molecular structure ensures superior mechanical properties, outstanding optical properties (gloss), improved dimensional stability, and easy processing.

Characteristics

	Method	Unit	Typical Value (*)
Rheological Properties			
Melt Flow Rate			
190°C/2.16 kg	ASTM D1238	g/10 min	6.0
Density	ASTM D1505	g/cc	0.935
Mechanical Properties			
Tensile Modulus	ASTM D638	psi	93,000
Tensile Strength @ Yield	ASTM D638	psi	2,600
Tensile Strength @ Break	ASTM D638	psi	1,700
Elongation @ Yield	ASTM D638	%	8
Elongation @ Break	ASTM D638	%	340
Flexural Modulus (1% Secant)	ASTM D790	psi	100,000
Thermal Properties			
Melting Point	ASTM D3417	°C/°F	122 / 252
Vicat Softening Point	ASTM D1525	°C/°F	115 / 239
ESCR			
10% Igepal	ASTM D1693 (Cond. B)	F ₅₀	300 h.
100% Igepal		F ₅₀	>1000 h.
UV Rating			
ARM Low Temperature Impact (0.250")	ARM Method	ft-lbs	180

(*) Data not intended for specification purposes

Processing

Recommended PIAT range of 210 - 222°C. (Maximum recommended PIAT 222°C.)
Molding at higher PIAT is recommended for enhanced physical properties and part to part consistency.

Handling and storage

Please refer to the material safety data sheet (MSDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the MSDS of our product.

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