

Description

Characteristics: Lumicene® mPE M4043 UV is a second generation metallocene medium density polyethylene (mMDPE) with hexene as comonomer. Lumicene mPE M4043 UV is a natural grade available in 35 mesh powder form.

Applications: Lumicene® mPE M4043 UV is intended for the manufacture of rotomolded items.

Characteristics

	Method	Unit	Typical Value (*)
Rheological Properties			
Melt Flow Rate			
190°C/2.16 kg	ASTM D1238	g/10 min	4.0
Density	ASTM 1505	g/cc	0.940
Mechanical Properties			
Tensile Modulus	ASTM D638	psi	117,000
Tensile Strength @ Yield	ASTM D638	psi	3,000
Tensile Strength @ Break	ASTM D638	psi	1,700
Elongation @ Yield	ASTM D638	%	8
Elongation @ Break	ASTM D638	%	300
Flexural Modulus (1% Secant)	ASTM D790	psi	128,000
Thermal Properties			
Melting Point	ASTM D3417	°C/°F	126 / 259
Vicat	ASTM D1525	°C/°F	119 / 247
ESCR			
10% Igepal	ASTM D1693	F ₅₀	155 h.
100% Igepal	Cond. B	F ₅₀	>900 h.
UV Rating			
			>20
ARM Low Temperature Impact (0.250")			
	ARM Method	ft-lbs	180

(*) Data not intended for specification purposes

Processing

Recommended PIAT range of 200°C - 230°C. (Maximum recommended PIAT 248°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.

MDPE M4043 UV 9/2017