

Description

Characteristics: Lumicene® mPE M3583 UV is a second generation metallocene medium density polyethylene (mMDPE) with hexene as comonomer. Lumicene mPE M3583 UV is a natural grade available in 35 mesh powder form.

Applications: Lumicene® mPE M3583 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 | F ₅₀ | 300 h. |
| 100% Igepal | Cond. B | F ₅₀ | >1000 h. |
| UV Rating | | | |
| ARM Low Temperature Impact (0.250") | ARM Method | ft-lbs | 150 |

(*) Data not intended for specification purposes

Processing

Recommended PIAT range of 180°C - 210°C. (Maximum recommended PIAT 248°C.)
Molding at higher PIAT is recommended for enhanced mechanical properties.

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 M3583 UV