



Lumicene® mPE M3581UV

Metallocene Medium Density Polyethylene Rotational Molding Resin – Pellet Form

ROTATIONAL MOLDING

RESIN PROPERTIES ⁽¹⁾

	Method	Unit	Typical Value
Melt Flow Index	D1238	g/10 min	–
190°C/2.16 kg	–	–	6
Density	D792	g/cm ³	0.935
Melting Temperature	D3418	°F	252

MECHANICAL PROPERTIES ⁽¹⁾

	Method	Unit	Typical Value
Tensile Modulus	D638	psi	93,000
Tensile Strength at Yield	D638	psi	2,600
Tensile Strength at Break	D638	psi	1,700
Elongation at Yield	D638	%	8
Elongation at Break	D638	%	340
Flexural Modulus (1% Secant)	D790	psi	100,000
Vicat Softening Temperature	D1525	°F	239
ESCR ⁽²⁾	D1693	hrs	–
10% Igepal	D1693		300
100% Igepal	–		> 1,000
UV Rating (G155, cycle1)	–	–	20
ARM Impact at -40°C (0.125" / 0.250")	–	ft-lbs	71 / 180

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.

(2) Environmental Stress Crack Resistance (ESCR).

CHARACTERISTICS:

- Second generation metallocene
- Superior mechanical properties
- Outstanding optical properties (gloss)
- Improved dimensional stability
- Easy processing

APPLICATIONS:

- NSF standard 51, 61
- Rotational-molded items

All tests were run under laboratory conditions using American Society for Testing and Materials standards (where applicable) or internal testing procedures. The data is offered in good faith but is intended as a general guide only, and does not necessarily represent results that may be obtained elsewhere. The use of Bayport Polymers LLC ("Baystar") products must be guided solely by the user's own methods for selection of proper formulation to ascertain fitness for any specific application. Baystar disclaims any responsibility for misuse or misapplication of its products and the user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained in the data or the use of the product. The data is provided without reference to any intellectual property issues, as well as federal, state, or local laws which may be encountered in the use thereof. BAYSTAR MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. Baystar's liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited, at customer option, to replacement of nonconforming goods or refund not to exceed the purchase price plus transportation charges thereon in respect to any material subject to a claim. In addition to any prohibitions of use (if any), Baystar may further prohibit or restrict the sale of its products into certain applications. For further information, please contact your Baystar representative. All products supplied by Baystar are subject to its standard terms and conditions set out in the contract or applicable purchase order. Baystar is a registered trademark of Bayport Polymers LLC. Lumicene is a registered trademark of TotalEnergies SE. This document may not be distributed, displayed (in any form including a website), copied, altered, or reproduced in whole or in part without Baystar's prior written authorization. To the extent Baystar specifically authorizes distributing, displaying and/or copying this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information.

