

Microthene®

# MP 643-662

Linear Low Density Polyethylene  
Rotational Molding Grade  
Melt Index 3.6 Density 0.9395

## Applications

MICROTHENE MP 643-662 is a linear medium density polyethylene powder for rotomolding a variety of objects, including drums, agricultural and chemical storage containers, playground equipment and municipal trash containers.

## Certification

MP 643-662 meets the requirements of Food and Drug Administration regulation, 21 CFR 177.1520. This regulation allows the use of this olefin polymer in "...articles or components of articles intended for use in contact with food." Specific limitations or conditions of use may apply. Contact your Equistar sales representative for more information.

## Processing Techniques

Specific recommendations for conditions under which MP 643-662 should be processed can be made only when the end use and type of processing equipment are known. For exact recommendations, please contact your Equistar sales representative.

## Physical Properties

MP 643-662 is a UV-stabilized, 35-mesh powder and is also available in pellet form as PETROTHENE® GA 643-662.

Property	Value	Units	ASTM Test Method	Sample
Melt Index (190/2.16)	3.6	g/10 min	D 1238	Powder
Density	0.9395	g/cm <sup>3</sup>	D 1505	Compression molded
ESCR, Cond. A, F <sub>50</sub>				
100% Igepal®	>1,000	hrs	D 1693	Rotomolded**
10% Igepal®	480	hrs	D 1693	Rotomolded**
Flexural Modulus, 1% Secant	110,000	psi	D 790	Rotomolded**
Tensile Strength @ Yield, 2"/min*	2,600	psi	D 638	Rotomolded**
Heat Distortion Temperature @ 66 psi	52	°C	D 648	Rotomolded**
@ 264 psi	40	°C	D 648	Rotomolded**
Low Temperature Impact 1/8" specimen	51	ft-lbs	ARM STD	Rotomolded**
1/4" specimen	140	ft-lbs	-40°F impact	Rotomolded
Meets FDA Requirements	yes			
UV-stabilized	yes			

\* Type IV Specimen

\*\* Thickness of specimen is 1/8"

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