

Technical Data Sheet

Microthene MP643962

Linear Low Density Polyethylene

Product Description

Microthene MP643962 is a linear medium density polyethylene powder selected by customers for rotomolding a variety of objects, including drums, agricultural and chemical storage containers, playground equipment and municipal trash containers. MP643962 is a UV-stabilized, 35-mesh powder and is also available in pellet form as *Petrothene* GA643962.

Application	Containers; Drums; Intermediate Bulk Containers; Jerry Cans; Sports, Leisure & Toys
Market	Rigid Packaging
Processing Method	Rotomolding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	3.6	g/10 min	3.6	g/10 min	ASTM D1238
Density, (23 °C)	0.9395	g/cm ³	0.9395	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus					
(1% Secant)	119000	psi	820	MPa	ASTM D790
(2% Secant)	101000	psi	700	MPa	ASTM D790
Tensile Strength at Yield	2900	psi	20.0	MPa	ASTM D638
Environmental Stress Crack Resistance, F ₅₀ (100% Igepal®, Cond A)	>1000	hr	>1000	hr	ASTM D1693
Impact					
Low Temperature Impact					
1/8" specimen @ -40 °F	54	ft-lbs	73	J	ARM
1/4" specimen @ -40 °F	160	ft-lbs	215	J	ARM
Thermal					
Deflection Temperature Under Load					
(66 psi, Unannealed)	136	°F	58	°C	ASTM D648
(264 psi, Unannealed)	104	°F	40	°C	ASTM D648