

Technical Data Sheet

Microthene MP652962

High Density Polyethylene



Product Description

Microthene MP652962 is a hexene HDPE powder selected by customers for rotationally molding large tank applications. MP652962 is a UV-stabilized, 35-mesh powder and is also available in pellet form as *Petrothene* GA652962.

Application	Containers; Intermediate Bulk Containers; Tanks, Industrial
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)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Density, (23 °C)	0.942	g/cm ³	0.942	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus					
(1% Secant)	147000	psi	1010	MPa	ASTM D790
(2% Secant)	124000	psi	855	MPa	ASTM D790
Tensile Strength at Yield	3400	psi	23.4	MPa	ASTM D638
Environmental Stress Crack Resistance					
F ₅₀ (10% Igepal®, Cond A)	50	hr	50	hr	ASTM D1693
F ₅₀ (100% Igepal®, Cond A)	400	hr	400	hr	ASTM D1693
Impact					
Low Temperature Impact					
1/8" specimen @ -40 °F	57	ft-lbs	77	J	ARM
1/4" specimen @ -40 °F	160	ft-lbs	215	J	ARM
Thermal					
Deflection Temperature Under Load					
(66 psi, Unannealed)	149	°F	65	°C	ASTM D648
(264 psi, Unannealed)	109	°F	43	°C	ASTM D648

