

## Technical Data Sheet

### *Petrothene* GA643962

Linear Low Density Polyethylene

#### Product Description

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

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

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
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 <sup>3</sup>	0.9395	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
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 <sub>50</sub> (100% Igepal®, Cond A)	>1000	hr	>1000	hr	ASTM D1693
<b>Impact</b>					
Low Temperature Impact					
1/8" specimen @ -40 °F	54	ft-lbs	55	J	ARM
1/4" specimen @ -40 °F	160	ft-lbs	215	J	ARM
<b>Thermal</b>					
Deflection Temperature Under Load					
(66 psi, Unannealed)	136	°F	58	°C	ASTM D648
(264 psi, Unannealed)	104	°F	40	°C	ASTM D648