

# PAXON<sup>®</sup> HDPE

High Density Polyethylene

## 7204 Rotational Molding Resin

### Description

7204 is a black, 35 mesh crosslinkable HDPE powder intended for use in rotational molding applications where long-term outdoor UV protection is required. Properly molded parts made with 7204 exhibit excellent impact strength, tear strength, tensile creep resistance, as well as exceptional stress crack resistance.

### Applications

- High ESCR outdoor storage tanks, vessels
- Marine fuel tanks
- Recreational vehicle fuel tanks
- Large refuse containers

Properties	Test Based On	Units (SI)	Nominal Value <sup>1</sup>
<b>Classification</b>			
Density	ASTM D-1505	lbs/ft <sup>3</sup> (g/cm <sup>3</sup> )	59.7 (0.955)
<b>Mechanical</b> (23°C, 50% relative humidity, unless otherwise noted)			
Tensile Strength at Yield	ASTM D-638	Psi (MPa)	3,000 (21)
Elongation at Break	ASTM D-638	%	700
Tensile Modulus of Elasticity	ASTM D-638	Psi (MPa)	115,000 (793)
Flexural Modulus <sup>2</sup>	ASTM D-790	Psi (MPa)	100,000 (689)
Impact Brittleness Temperature	ASTM D-746	°F (°C)	<-180 (<-118)
Dart Impact at -40°C	ARM Std. (B) 125 mil thickness	ft-lb (joules)	60 (81)
Environmental Stress Crack Resistance <sup>3</sup>	ASTM D-1693	hrs	>1,000
<b>Thermal</b>			
Vicat Softening Temperature	ASTM D-1525	°F (°C)	250 (121)
Heat Deflection Temperature, 66 psi load	ASTM D-648	°F (°C)	150 (66)
<b>Processing</b>			
Bulk density	ASTM D-1895	lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	36.5 (584)

1. Values are typical and should not be interpreted as specifications.
2. Method 1, Procedure A (1"x3"x0.125"), Tangent calculation.
3. Condition B, specimen thickness: 0.070"-0.080", notch depth: 0.012"-0.015", 50°C, 100% Igepal.