

## ROMTEC POLY PIPE

The following is an example of the Romtec Poly Pipe included in the design of this building.

### **Specifications**

• 12" High Density Polyethylene (HDPE)







High Density Polyethylene

# 7004 Crosslinkable Rotational Molding Resin

#### Description

7004 is a UV-stabilized, 35 mesh crosslinkable HDPE powder intended for use in rotational molding. Properly molded parts made with 7004 show exceptional environmental stress cracking resistance, thermal resistance, and notched failure resistance. The high flow base resin promotes rapid melting and outstanding part fill during processing while the finished part exhibits high performance characteristics reflecting crosslinked molecular weight. This resin is available in various colors, plus natural.

### **Applications**

High ESCR, outdoor storage tanks, vessels

- Marine fuel tanks
- Recreational vehicle fuel tanks
- Large refuse containers

Additive Package	Stabilizer		
7004	Long term UV stabilizer		

Molded Properties <sup>2</sup>	Test Based On	Unit SI (English)	Typical Value <sup>1</sup>
Tensile Strength at Yield	ASTM D 638	MPa (psi)	21 (3,000)
Elongation at Break	ASTM D 638	%	> 300
Tensile Modulus of Elasticity	ASTM D 638	MPa (psi)	793 (115,000)
Flexural Modulus <sup>3</sup>	ASTM D 790	MPa (psi)	689 (100,000)
Impact Brittleness Temperature	ASTM D 746	°C (°F)	< -118 (< -180)
Crosslink Potential	ExxonMobil Method		2.5
Environmental Stress Crack Resistance <sup>4</sup>	ASTM D 1693	hrs	$F_0 > 1,000$
Notched Izod	ASTM D 256	joules/m (ft-lb/in)	907 (17)
Notched Izod (-40°C)	ASTM D 256	joules/m (ft-lb/in)	240 (4.5)
Thermal Properties			
Vicat Softening Temperature	ASTM D 1525	°C (°F)	121 (250)
Heat Deflection Temperature, 66 psi	ASTM D 648	°C (°F)	66 (150)
Processing <sup>5</sup>			
Bulk Density	ASTM D 1895	kg/m <sup>3</sup> (lbs/ft <sup>3</sup> )	370 (23)

- 1. Values are typical and should not be interpreted as specifications. Values may change with future development..
- 2. All molded properties were measured on rotomolded specimens.
- 3. Method1, Procedure A (1'x3'x0.125'), Tangent calculation.
- 4. Condition A and B, 10% Igepal CO-630.

5. Measurement based on resin as supplied.