

Technical Data Sheet

Petrothene LR52800E

High Density Polyethylene



Product Description

Petrothene LR52800E is a multi-modal, broad molecular weight high density *polyethylene* based compound designed for use in jacketing, conduit or wire insulation. *Petrothene* LR52800E contains a robust additives package for thermal stabilisation.

This product meets the requirements of ASTM D 1248, Type III, Class A, Category 5, Grade J4.

This grade is not intended for medical and pharmaceutical applications.

Application	Wire & Cable
Market	Industrial, Building & Construction; Wire & Cable
Attribute	Good Electrical Properties; Good Thermal Stability; High Density; High Elongation; High ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/2.16 kg)	0.3	g/10 min	ISO 1133-1
(190 °C/5.0 kg)	1.1	g/10 min	ISO 1133-1
Density	0.950	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	900	MPa	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	23	MPa	ISO 527-1, -2
Tensile Elongation at Break	700	%	ASTM D638
Environmental Stress Crack Resistance	> 2000	hr	ASTM D1693
Hardness			
Shore Hardness, (Shore D)	61		ISO 868
Thermal			
Oxidation Induction Time, (210 °C)	> 30	min	ISO 11357-6
DSC Melting Point	130	°C	ISO 3146
Electrical			
Volume Resistivity	> 10E16	ohm*cm	ASTM D257
Dielectric Strength	20	kV/mm	IEC 60243-1
Additional Information			
Moisture Content	< 0.03	%	LYB Method

