Petrothene KR52828E

Compounded Polyolefin

Product Description

Petrothene KR52828E is a multi-modal, broad molecular weight high density polyethylene-based compound designed for use in jacketing, conduit or wire insulation.

Petrothene KR52828E contains a robust additives package for thermal stabilisation and carbon black for UV stabilization.

This grade is not intended for use in medical or pharmaceutical applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe
Processing Methods	Extrusion Wire
Features	High Density, Good Electrical Properties, High Elongation, High ESCR (Environmental Stress Cracking Resistance), Good Thermal Stability, Good UV Resistance
Typical Customer Applications	Wire & Cable

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.956	g/cm³
Melt flow rate (MFR)	ISO 1133		
(190°C/2.16kg)		0.3	g/10 min
(190°C/5.0kg)		1.1	g/10 min
Mechanical			
Tensile Elongation @ Brk	ASTM D 638	700	%
Tensile Modulus (23 °C, v = 1 mm/min)	ISO 527-1, -2	900	MPa
Tensile Stress at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	23	MPa
ESCR (ASTM-Fo)	ASTM D 1693/IEC 538	>2000	h
Hardness			
Shore hardness (Shore D)	ISO 868	61	
Thermal			
Melting temperature		130	°C
Note: ISO 3146			
Oxidation induction time (OIT) (200°C)	ISO 11357-6 / EN 728	>30	min
Electrical			
Dielectric strength	IEC 60243-1	20	kV/mm
Specific volume resistivity	ASTM D 257/IEC 93	>10E16	Ohm*cm
Additional Information			
Carbon black content	ISO 6964	2.25	%
Moisture content		0.05	%
Note: Test method: VP608B			

Additional Properties

Petrothene KR52828E meets the requirements of the following: ASTM D 1248, type III, Class C, Category 5, Grade J4.

Recommended processing temperatures: 190°C to 230°C.

Notes

Typical properties; not to be construed as specifications.