



Kimcross 1230 /1331

Cross-linkable Polyethylene

ProductDescription

Kimcross 1230 is a cross-linkable polyethylene compound, specially designed for Wire and Cable insulation applications and meets the requirement of the IEC 60502-1.

The Kimcross 1230 base material in combination with the Kimcross 1331 catalyst master-batch will accelerate the moisture-induced crosslinking reaction. Kimcross 1230 is based upon a low density polyethylene and contains permanent scorch retardant additives which ensure safe processing and gives a possibility to use a highly active crosslinking catalyst. Kimcross 1331 contains antioxidant and a drying agent.

Kimcross 1230 is used with Kimcross 1331 (a catalyst master-batch) in the ratio of 95:5

General

Features	• Clean/High Purity	• Cross-linkable	• Excellent Process ability
Uses	• Appliance Wire Jacketing	• Cable Jacketing	• Insulation
Appearance	• Natural color		
Form	• Pellets		
Packaging	• 25 Kg moisture resistance sacks		
Processing Method	• Extrusion		

Physical	Nominal Value	Unit	Test Method
Density	0.920	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/5 kg)	2.0	g/10 min	ISO 1133

Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	> 20.0	MPa	IEC 60811-1-1
Tensile Strain (Break)	> 700	%	IEC 60811-1-1

Thermal	Nominal Value	Unit	Test Method
Hot Set			IEC 60811-2-1
200°C, Elongation under load, 0.20 MPa	< 100	%	
200°C, Permanent deformation, 0.20 MPa	< 10	%	

Ageing	Nominal Value	Unit	Test Method
Retention of Tensile Strength 135°C, After Ageing 168 hr	>80	%	

Electrical	Nominal Value	Unit	Test Method
Dielectric Constant (50 Hz)	< 2.9		IEC 60250
Dissipation Factor (50 Hz)	< 0.00050		IEC 60250
DC Volume Resistivity	10 ¹⁶	Ω.cm	IEC 60093
Dielectric Strength	> 22	kV/mm	IEC 60243-1

Extrusion

As a guide the following temperature profile is recommended:

Zone 1	Zone 2	Zone 3	Zone 4	Head	Die
130	150	170	190	210	220

Crosslinking

These products can be cross-linked by immersion in hot water or exposed to low pressure steam at a temperature up to 90°C. This time period may be varied due to the humidity, thickness of insulation, reel size and temperature. Recommended Time to reach Hot Set elongation value of 100% at different insulation thickness is listed here:

Insulation thickness (mm)	Time (hr)
0.7	4
1.8	6

Not

- Test results have been achieved with a ratio of 95 to 5. Change this ratio gives different results and sometimes outside of the standard
- Test results have been achieved with laboratory equipment. Change the test machine may give different results and sometimes outside of the standard
- The specifications given are the guidelines only.
- Above compound is suitable to run on different machines; however some adjustments may be required on individual machine.
- The customers are advised to check the quality, prior to commercial use. There is no guarantee and/or warrantee what so ever, after processing