



Kimcross 1207 / 1357

Cross-linkable Polyethylene

ProductDescription

Kimcross1207 is across-linkable polyethylene compound, specially designed for Wire and Cable insulation applications and meets the requirement of the IEC 60502-1 and HD626

The Kimcross 1207 base material in combination with the Kimcross 1357 catalyst master-batch will accelerate the moisture-induced crosslinking reaction. Kimcross 1207 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 1357 contains antioxidant and a drying agent.

Kimcross 1207 is used with Kimcross 1357 (a catalyst master-batch) in the ratio of 95:5

General

Additive	•Unspecified Additive		
Features	•Black/High Purity	•Cross-linkable	•Good Process ability
Uses	•Appliance Wire Jacketing	•Cable Jacketing	•Self-Supporting cable insulation
Appearance	•Black		
Form	•Pellets		
Packaging	•25 Kg moisture resistance sacks		
Processing Method	•Extrusion		

Physical	Nominal Value	Unit	Test Method
Density	0.935	g/cm ³	ISO 1183
Melt Mass-Flow Rate(MFR)(190°C/5kg)	3.0	g/10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress(Yield)	>18.0	MPa	IEC 60811-1-1
Tensile Strain(Break)	>420	%	IEC 60811-1-1
Thermal	Nominal Value	Unit	Test Method
Hot Set Test			IEC 60811-2-1
200°C,Elongation under load,0.30MPa	<80	%	
200°C,Permanent deformation, 0.30MPa	<10	%	
Ageing	Nominal Value	Unit	Test Method
Retention of Tensile Strength 150°C,After Ageing 240hr	>85	%	IEC 60811-1-2
Electrical	Nominal Value	Unit	Test Method
Dielectric Constant (50Hz)	<2.9		IEC60250
Dissipation Factor (50Hz)	<0.001		IEC60250
DC Volume Resistivity	10 ¹⁵	Ω.cm	IEC60093
Dielectric Strength	>22	kV/mm	IEC60243-1

Extrusion

As a guide the following temperature profile is recommended

Zone 1	Zone 2	Zone 3	Zone 4	Head	Die
140	160	180	200	220	230

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

Note

- Test results have been achieved in lab condition with a ratio of 95 to 5. Miss handling may give different result 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