

# ADD UNITED

## Addcross 1230/1331

### Cross-linkable Polyethylene

#### Product Description

Addcross 1230 is a cross-linkable polyethylene compound, specially designed for Wire and Cable insulation applications and meets the requirement of the IEC 60502-1, BS 7655 1.3., ASTM D 1248 Type I, Class A, Category 4, HD 603 S1

The Addcross 1230 base material in combination with the addcross 1331 catalyst master-batch will accelerate the moisture-induced crosslinking reaction Addcross 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. Addcross 1331 contains antioxidant and drying agent. Addcross 1230 is used with Addcross 1331 (a catalyst master-batch) in the ratio of 95:5

General			
Features	• Clean/High Purity	• Cross-linkable	• Good 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 <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/5 kg)	4.0	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	> 16.0	MPa	IEC 60811-1-1
Tensile Stress (Break)	> 20.0	Mpa	IEC 60811-1-1
Tensile Strain (Break)	>400	%	IEC 60811-1-1
Thermal	Nominal Value	Unit	Test Method
Hot Set			IEC 60811-2-1
200°C, Elongation under load, 0.20 MPa	< 80	%	
200°C, Permanent deformation, 0.20 MPa	< 10	%	
ESCR ,50°C , 10% Igepal, F <sub>50</sub>	< 100	hr	ASTM D1693
Retention of Tensile Strength 135°C, After Ageing 168 hr		%	IEC 60811-1-2
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 <sup>16</sup>	Ω.cm	IEC 60093
Dielectric Strength	> 22	kV/mm	IEC 60243-1

#### Process

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

#### 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



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