

PVCFR100

PVC Flame Retardant Reduced Toxicity Sheathing Compound



Product Description

This compound is intended for the sheathing of LV & MV cable applications up to 90°C. PVCFR100 compound meets the basic requirements of **Type 9** as per **BS 7655-4.2** & **ST2** according to **IEC 60502 - 1&2**.

General features:

- **Flame retardant with reduce toxicity**
- **Low halogen contents**
- **Excellent gloss and surface finish**
- **Free flowing pellets**
- **Anti Termite and Anti Rodent**
- **Lead free**
- **Excellent mechanical properties**

Technical Specification

Physical Properties	Test Method	Unit	Typical Value
Density	-	g/cm ³	1.5 ± 0.03
Hardness	ASTM D 2240	Shore D	52 ± 3
Mechanical Properties			
Tensile Strength	BS EN 60811-501	N/mm ²	> 15
Elongation at break	BS EN 60811-501	%	> 220
After Ageing at 100°C for 168 hrs			
Variance in Tensile Strength	BS EN 60811-401	%	< 15
Variance in Elongation	BS EN 60811-401	%	< 15
Thermo Mechanical Properties			
Loss of Mass Test @ 100°C for 168 hrs	BS EN 60811-409	mg/cm ²	< 1.0
Elongation Test at -15°C	BS EN 60811-405	%	> 60
Bending Test at -15°C	BS EN 60811-505	-	No Cracks
Impact Test at -15°C	BS EN 60811-504	-	No Cracks
Pressure Test at 90°C	BS EN 60811-508	%	< 35
Resistance to cracking (Heat shock)	BS EN 60811-509	-	No Cracks
Fire & Smoke Properties			
Oxygen Index	ASTM D2863	%	> 30
Temperature Index	ASTM D2863	°C	≥ 250
Halogen Acid Gas Emission	IEC 60754-1	%	<15
Electrical Properties			
Insulation Resistance Constant 'K' @ 20°C	BS 6469-99-2	MΩ.Km	> 0.01

Note: All above tests were performed on extruded cable sample.

Recommended Extruder Temperature Profiles

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Head1	Head2	Die
140°C	145°C	155°C	165°C	170°C	175°C	175°C	180°C

Note: It is recommended to predry the compound @70°C for 4 - 6 hrs in dehumidifying unit if material is kept for long time under high humidity levels.

Colorability:

Addition of approved color PVC-masterbatches up to a maximum of 1% has no adverse effect on the properties of PVCFR100 compound.

Packaging:

PVCFR100 compound is available in 1500Kg jumbo PP bags with PE liner and UV protective lamination.

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