

# PVCTI30

## PVC Heat Resistant Insulation Compound



### Product Description

This compound is intended for the insulation of LV energy cable applications. PVCTI30 compound is in compliance with the requirement of **TI-3** according to **BS EN 50363-3**.

### General features:

- **Outstanding Thermal Stability**
- **For Conductor 90° C Application**
- **Excellent gloss and surface finish**
- **Free flowing pellets**
- **Excellent processing**
- **Outstanding mechanical properties**

### Technical Specification

Physical Properties	Test Method	Unit	Typical Value
Density	-	g/cm <sup>3</sup>	1.36 ± 0.03
Hardness	ASTM D 2240	Shore D	53 ± 3
Mechanical Properties			
Tensile Strength	BS EN 60811-501	N/mm <sup>2</sup>	> 16
Elongation at break	BS EN 60811-501	%	> 200
After Ageing at 135°C for 336 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 @ 115°C for 336 hrs	BS EN 60811-409	mg/cm <sup>2</sup>	< 1.2
Thermal Stability @ 200°C	BS EN 60811-405	min	> 280
Elongation Test at -15°C	BS EN 60811-505	%	> 100
Bending 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
Electrical Properties			
Insulation Resistance Constant 'K' @ 90°C	BS EN 50395	MΩ.Km	> 0.15

**Note:** All above tests were performed on extruded insulated core sample.

### Recommended Extruder Temperature Profiles

Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Head1	Head2	Die
130°C	140°C	150°C	160°C	170°C	175°C	180°C	185°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 PVC based color masterbatch up to a maximum of 1% has no adverse effect on the properties of PVCTI30 compound. Predrying of color MB is recommended subject to environmental conditions.

### Packaging:

PVCTI30 compound is available in pelletized 1000Kg and in 25Kg bags. Bags are protected from moisture ingress.

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