

## TECHNICAL DATA SHEET

### **KI-05 FR (ROHS) N: Flame Retardant Compound for sheathing Application (Data cables)**

#### **Description:**

**KI-05 FR (ROHS) N** is suitable for sheathing applications in a wide variety of cables. It is formulated with a high-quality resin with plasticizers, stabilizers and other specialty chemicals. It is RoHS compliant.

#### **Specification:**

- IS 5831: 2001 Type ST1
- ISO/IEC 11801, IEC 61156 -CAT5 Application

#### **Typical Properties:**

Property	Unit	Test Method	Typical Value
Application temperature			70°C
Sp. Gravity @27°C		ASTM - D - 792	1.44 ± 0.03
Hardness @27°C	Shore A	ASTM - D 2240	90 ± 2
Thermal Stability@200°C	Minutes	IS : 10810 (60) / EN 60811-3-2	>110
Tensile Strength (TS) @27°C	MPa	IS : 10810 (7) / EN 60811-1-1	> 14.0
Elongation at Break (E.B) @27°C	%	IS : 10810 (7) / EN 60811-1-1	> 225
Ageing Test	Temperature	IS 5831	80±2
	Duration		Hr
Variation of T.S, Max.	%	IS : 10810 (11) / EN 60811-1-2	± 20
Variation of E.B, Max.	%	IS : 10810 (11) / EN 60811-1-2	± 20
Mass Loss on Ageing	mg/cm <sup>2</sup>	IS : 10810 (10) / EN 60811-3-2	< 2.0
Limiting Oxygen Index	%	IS : 10810 (58)/ ASTM D 2863	>29.0
Volume Resistivity @27°C	Ohm - cm	ASTM D 257 / IS: 3396 / 79	> 1x10 <sup>14</sup>

\* Test specimen made after milling the granules and then in compression mould at 160 °C for 10 min with 200kg/cm<sup>2</sup> hydraulic pressure

**Colour:** Natural /as per requirement.

#### **Processing:**

**KI-05 FR (ROHS) N** can be processed on any good extruder designed for PVC cable extrusion at temperature in the range of 140°C- 180°C.This is the guideline temperature range, actual temperature should be optimized by the user depending upon the other processing variables. The screw must have a good homogenizing capacity. Preheating of granules at 80+/-5°C is always advisable for better processing.

#### **Packaging:**

**KI-05 FR (ROHS) N** is available in the form of free flowing pellets and supplied in bags with sealed double layer PE liner to prevent moisture. The finished bag weight is either 25 kg woven sacks bag or in 1000kg jumbo bags.

#### **Storage and Shelf Life:**

Material should be store in moisture free cool & dry place and should be consume within three months from the date of manufacturing.

#### **Safety:**

**KI-05 FR (ROHS) N** is not classified as a dangerous product group.

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. These are all the typical values only and subject to change without prior intimation. The product is sold upon condition that purchaser should make their own tests to determine the suitability of such product of their particular purpose and purchasers assume all risks and liability for the results of the use of the product.

For more information pl contact at;

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