

**TECHNICAL DATA SHEET**

**KI-NP-1**

**GENERAL PURPOSE PVC INSULATION COMPOUND**

**DESCRIPTION:** KI-NP1 is specially formulated PVC Compound MEET IS-5831-1984 (A) & BS-6746:1984 TYPE-T11 & T12 FOR WIRE & CABLE APPLICATION. It is a General purpose insulation intended for using cables operating at a maximum rated conductor temperature 70°C.

**CHARACTERISTICS :**

- Good surface smoothness
- Excellent electrical properties.
- Long run Extrusion without Thermal degradation
- Good physical and thermal property.
- Balances of properties and processability.

**SPECIFICATION :**

This compound will meet TYPE-‘A’ of IS-5831

**PROPERTY ( PHYSICAL ) :**

Properties	Unit	Requirement As Per IS-5831	Typical value*
Specific gravity	-	Not Applicable	1.50±0.03
Shore hardness	“A”	Not Applicable	89+ 2
Before Ageing Tensile strength	N/mm <sup>2</sup>	12.5 (min)	17.1
Before Ageing Elongation at break	%	150 (min)	290
After ageing @ 80°C ± 2°C for 7 days			
After Ageing Tensile strength	%	12.5(min)	16.4
Variation in Tensile strength	%	± 20	-4.09
After Ageing Elongation at break	%	150(min)	265
Variation in Elongation	%	± 20	-8.62
Thermal Stability @ 200°C ± 0. 5°C	Minutes	80 (min)	110
Volume Resistivity @ 27°C	Ohm-cm	1x 10 <sup>13</sup> (min)	6.0X10 <sup>14</sup>
LOSS OF MASS	Mg/cm <sup>2</sup>	2(max)	0.8

\*\*\* The properties have been tested on moulded sheet

### **Processing Techniques:**

1. The recommended processing temperatures are 150<sup>0</sup>c to 180<sup>0</sup>c , However the processing Temperature may be adjusted as per requirement for individual operations.
2. KI-NP1 provides smooth surface finish and outstanding output rates over a broad range of extrusion running condition .
3. For smooth processing and better results it is recommended to preheat the material before use.

**Delivery/packages** : Pellet form and packed in 25 kg HDPE woven sacks with inner liner to ensuring prevention from uptake of moisture and contamination.

### **Storage:**

Material shall be kept in a cool dry place.

**(The information given in the document is believed to be reliable and is given in good faith but without warranty. The user should test the product to assertion the suitability for intended use. The product specification or the whole document is subject to change without any prior notice.)**

For more information Pl contact at;

#### **Head Office:**

2B Pretoria Street, Kolkata-01 Tel:  
91-33-22823744/45/3671  
Fax:91-33-22823739

**E-mail:** [kolkata@ddevgroup.in](mailto:kolkata@ddevgroup.in)

**Website:** [www.ddevgroup.in](http://www.ddevgroup.in)

#### **Works:**

Survey No: 24/3, Demni Road, Village-Demni Dadra(  
Dadra & Nagar Haveli)-396230, India  
Tel:91-260-2668 758/59/61,Fax:91-260 2668760

**E-mail:** [dadra@ddevgroup.in](mailto:dadra@ddevgroup.in)

#### **Mumbai Office**

106, Laxmi Plaza, Laxmi Industrial Estate  
New Link Road, Andheri(West)  
Mumbai-400053, India

**E-mail:** [mumbai@ddevgroup.in](mailto:mumbai@ddevgroup.in)