



METALEN PE-11K PREMIUM

Polyethylene composition for sheathing on power cables TU (underway)

Description

METALEN PE-11K PREMIUM is a composition based on black HDPE. METALEN PE-11K PREMIUM has high processability, low shrinkage and temperature stability during processing.

The main advantage of the material is a very high resistance to cracking under the environmental influence and high impact strength. In terms of resistance to photo-oxidative and thermal aging, and in terms of resistance to cracking under load, the composition surpasses the brand 273-81K. The compound has high physical and mechanical properties in tension and bending.

Application

METALEN PE-11K PREMIUM, due to its high resistance to thermal aging, cracking under load and high strength characteristics, is used for the manufacture of cable sheaths of medium, high and ultra-high voltage.

Characteristics

Feature	UOM	Value
1. Density	g/cm ³	0,947-0,955
2. Melt flow index, at 190 ° C, load of 5 kg	g/10 min	0,15-0,2
3. Spread of the melt flow index within the batch, not more	%	±10
4. Mass fraction of volatiles, not more	%	0,1
5. Mass fraction of carbon black, within	%	2,5±0,5
6. Resistance to cracking under load, at 50 ° C, more	hour	5000
7. Tensile strength, not less	MPa	36
8. Elongation at break, not less	%	700
9. Hardness (Shore D), 1 sec	NU	62±2
10. Brittleness temperature, not more	° C	-80
11. Tensile modulus, not less	MPa	850
12. Oxidation induction time at 200 ° C, not less	Min	90

Recycling Recommendations

METALEN PE-11K PREMIUM is processed by extrusion. The material is processable in the range from 170 to 240 °C.

Temperature Profile:

Extruder zones	Zone 1	Zone 2	Zone 3	Zone 4	Die plate
Temperature, °C	160-170	180-190	210-220	210-220	220-230

Packaging

The composition is packed in polypropylene laminated or plastic bags of $25 \pm 0,2$ kg, and the material can also be packed in Big-Bag with a 1000 kg polyethylene liner.

Storage conditions

Guaranteed shelf life is 24 months from the date of manufacture, provided that the product is stored in an indoor place, which excludes direct sunlight, at a distance of at least 1 m from heating appliances.

Marking (Labeling)

Each bag or "big bag" shall be stuck a label indicating the following data:

- name of the material and its brand
- number of Technical Conditions
- batch number
- date of manufacture
- net weight
- name of the manufacturer's company and its contact information
- warranty period of storage

Transport containers shall be marked in accordance with the requirements of GOST 14192-96 with the following information mandatory included:

- name of the material and its brand
- number of Technical Conditions
- batch number
- date of manufacture
- net weight of the packaging unit
- name of the manufacturer's company and its contact information
- warranty period of storage

Each unit of transport packaging in the form of a soft container or pallets with bags shall be stuck the manipulation (handling) signs "Protect from sunlight" and "Protect from moisture".

The information in this specification is correct and accurate within our competence. All offers and recommendations are given without guarantees, since the manufacturer's control does not extend to the conditions of use of the product during production. We also caution you that patents may exist for some uses of the product.

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