



Sheathing compound HM4 KBX 301

Sheathing compounds are designed as a thermoplastic, halogen free, fire retardant, low voltage sheathing material, which is suitable for use up to 1 KV, for operational temperature 90 °C sheathing material, which is suitable for use up to 1 KV, for operational temperature 90 °C. The properties of this compound comply with the requirements of: VDE 0207/24 HM4; IEC 60502-1 type ST 8

Processing

Standard extruders for thermoplastics equipped with low compression screw (1:1.2-1.4 compression ratio and 20-25 L/D ratio are suggested), and an adequate barrel thermoregulation. Screw cooling is not required. Filter net: not necessary; in case, use 40-80 mesh/cm² max. Anyway the use of the breaker plate is advisable, in particular using low compression screws.

EVA based masterbatches added at 1-1.5 % (approx.) by weight; predrying of colour masterbatch is suggested if moisture absorption occurred during storage (4-6 hours at 60-70 °C).

Properties

	Test method	Unit	Value
Elongation at break	IEC 60811-1-1	%	160
Density	ISO 1183	kg/m ³	1550
Tensile strength	IEC 60811-1-1	MPa	11
Mech. prop. after ageing, 168 hours; 90 °C			
- variation on tensile strength	IEC 60811-1-1	%	-8
- variation on elongation at break	IEC 60811-1-1	%	30
MFI 150 °C 21,6 kg	ISO 1133	g/10 min.	4
LOI	ASTM D 2863	%	36
Hot pressure test at 90 °C, max. penetration	IEC 60811-1-1	%	< 50
Corrosivity of Evolved Gases	IEC 60754-2	pH	>4,3
Conductivity	IEC 60754-2	mS/mm	>2,5
Shore D Hardness	ISO 868		50
Volume resistivity 20 °C	IEC 60502-1	Ohm.cm	6,73X10 ¹²
Volume resistivity 70 °C	IEC 60502-1	Ohm.cm	2,46X10 ¹⁰

Temperature profile

Zone 1	Zone 2	Zone 3	Zone 4	Collar	Head	Die
130-150	130-160	140-160	140-160	150-170	150-170	155-175

Storage

The product should be stored under the following conditions:

- closed and unbroken bags
- in ambient temperature not exceeding 30 °C
- avoid direct exposure to sunlight and weathering.

Product alterations could occur due to extended period of storage. Its use within six months from the production date is suggested.

Kabex a.s. accepts no liability of any kind in case the above mentioned conditions are not fulfilled. Our Technical Service is at your disposal for further information and advice upon the starting stage and also for any eventual necessity during the course of the product use.

Available packaging:

