

Granule Type: PP-B01

(Thermoplastic halogen-free fire-retardant compound for bedding of cable)

Description

Polyolefin based thermoplastic compound containing a fire-retardant system that contributes to give the cable self-extinguish properties without hologenetic acids evolution; furthermore, toxic and corrosive gases emission and smoke generation are particularly reduced. These characteristics make this compound suitable in all applications where the fire behavior of cable materials is one of the main concerns to be considered in establishing a high safety level in public places.

Specification: IEC 60502:ST8

Color: Natural

Physical Properties	Standard and Test Method	Unit	Typical value
Density	ASTM D 792 / IEC 60811-1-3	gr/cm³	1.49±0.03
Properties before ageing Tensile strength Elongation at break	IEC 60811-1-1	N/mm² %	min 9 min 125
Properties after ageing "7days at 100°c" Variation of Tensile Variation of Elongation	IEC 60811-1-2	% %	max ±40 max ±40
Hardness	ASTM D2240	Shore D	55±1
Melt Flow Index (150 °C/21.6 kg)	ASTM D1238	gr/10min	2±0.5
Heat shock test "1 hr at 150°c" Result to be obtained	IEC 60811-3-1		No Crack
Water absorption	IEC 60811-1-3	mg/cm²	max 10
Cold Bending test	IEC 60811-1-4		Pass
Cold impact test	IEC 60811-1-4		pass

Burning Properties		Standard and Test Method	Unit	Typical value
Oxygen Index		ASTM D2863	%	min 30
Acid gas emission	PH	IEC 60754 2		>4.3
	Conductivity	IEC 60754-2	μS/mm	≤10
Flame spread test on single cables		IEC 60332-1	mm	>50



Processing Condition: As a general guide, typical processing temperature are as follows:

	zone 1	zone 2	zone 3	zone 4	head	die
max (°C)	150	160	160	160	170	170
min (°C)	130	130	 140	140	150	150

Draw down ratio :1.2 \sim 1.8, L/D= nearly 22

Safety

PP-B01 is classified as no-dangerous material.

Storage

The product should be stored under the following conditions:

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

Packaging

It is available in the form of pellets and supplied in PP laminated bag with a net content of 25 kgs.