



Granule Type: PP- J01

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

Description

PP-J01 is a thermoplastic, oil resistance, low smoke, halogen free, flame-retardant cable jacketing compound. This product to be used outdoor applications and provides excellent processing characteristics combined with superior level of fire performance, excellent flexibility, and also high mechanical properties.

Specification:

PPJ meets the applicable requirements given below when processed using extrusion practice and testing procedure:

- IEC 60502-1 type ST8 and IEC 60092-359 type SHF1
- BS 7655:6.1 types LTS1, LTS2, LTS3, LTS4
- DIN VDE 0207, VDE 0250 part 24, Type HM2/HM4
- BS EN 50575

Physical Properties		Standard and Test Method	Unit	Typical value
Density		IEC 60811-1-3	gr/cm³	1.46±0.03
Properties before ageing (*) Tensile strength Elongation at break		IEC 60811-1-1	N/mm² %	min 12 min 175
Properties after ageing “7days at 100°C” Variation of Tensile strength Variation of Elongation at break		IEC 60811-1-2	% %	±40 ±40
Hardness		ASTM D2240	Shore D	53±2
Melt Flow Index(150 °C/21.6 kg)		ASTM D1238	gr/10min	5±0.5
Heat shock test “1 hr at 150°C” Result to be obtained		IEC 60811-3-1	--	No Crack
Oil immersion – 4 hr at 70°C Variation of tensile strength Variation of elongation at break			%	Max 20 Max 40
Hot pressure at 90°C		IEC 60811-3-1	%	30
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	%	33
Acid gas emission	PH	IEC 60754-2	--	>5
	Conductivity		µS/mm	≤10
Halogen acid gas evolution		IEC 60754-1	%	Zero
Smoke Density Rating		ASTM D 2843	%	8
Light Transmission		IEC 61034	%	70
Toxicity Index		NES 713	-	1.7

*Tested On cable extruded.



Processing Condition:

Most halogen free, low smoke materials have a melt viscosity higher than PE/PVC compounds. Such compounds require more power during processing, which leads to a rapid increase in melt temperature, as the screw speed increase.

PP- J01-OR have been processed on a variety of screw designs, but for optimum output the use of a low compression, low shear screw is recommended. A compression ratio of 1:1.2 is ideal.

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

	zone 1	zone 2	zone 3	zone 4	head	die
max (°C)	140	145	150	155	165	175
min (°C)	130	140	145	150	160	160

Color

PP-J01 color is natural. This product is a Colorable Compound with PE/EVA base master batch.

Safety

PP- J01 is classified as no-dangerous material.

Storage

PP- J01 must be stored at ambient conditions which not exceed 30 °C in closed and unbroken packaging in order to avoid exposure to direct sunlight and humidity. The compound should not contact directly with ground. And this product should be avoiding 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 kg.

Technical Service

Technical Service is available to help the customer to choose the best product for his requirements. Our Technical Service is at your disposal for further information and advice about the start-up and also for any possible necessity during the use of the product.