SPFR-S30

Thermoplastic Halogen-Free Flame-Retardant and Low Smoke Emission Compound for Cable Sheathing and Insulation

Product Description

Thermoplastic compound based on a well-chosen combination of polyolefins containing a fire-retardant system which provide the cable with self-extinguishing properties without producing halogenic acids. This characteristic renders the compound applicable where the fire behavior of the cable is of main concern in satisfying high levels of safety regulations.

Applications

SPFR-S30 is designed to be used as sheathing and insulation compound.

Specifications

SPFR-S30 meet the requirements of the below standards when processed using sound extrusion and testing procedure
IEC 60502 ST8

General Features

Good processability, Excellent surface finish, High flame-retardancy

Physical & Mechanical Properties	Standard & Test Method	Unit	Value
Density	IEC 60811-606	gr/cm^3	1.48
Melt Flow Index (MFI) (150 ˚C/21.6 kg)	IEC 60811-511	g/10 min	7
Hardness	ASTM D2240	Shore D	50
Tensile Strength	IEC 60811-501	MPa	13
Tensile Strain		%	180
Ageing (100 °C, 7 days)			
Variation of Tensile Strength	IEC 60811-401	%	=< 15
Variation of Tensile Strain		%	=< 20
Burning Properties			
LOI	ASTM D2863	%	32
pH	IEC 60754-2	%	6
Conductivity			1.4
Halogenic acid	IEC 60754-1		0.3

Note: The properties in the table are typical and should not be considered as standardized.

Processing Guidelines

The temperature profile for extrusion of SPFR-B20 can vary depending on the extruder and screw configurations, however, the following process conditions can be normally used

Barrel 1	130 - 140 ˚C
Barrel 2	130 - 140 ˚C
Barrel 3	140 - 150 ˚C
Barrel 4	140 - 150 ˚C
Clamp	150 - 160 ˚C
Head	150 - 160 ˚C
Die	160 - 170 ˚C
Screw	70 - 80 ˚C

Pre-drying of the compound is recommended and the temperature should not exceed 70 ˚C. Melt temperature during process is recommended to be kept under 160 ˚C.

Storage

Original packages should be kept closed and stored in dry conditions, away from direct sunlight in the temperature range between 10 to 30 ˚C

Packaging

25 kg bags (1250 kg per pallet)