#### **FRTEK**





SHAKUN POLYMERS PRIVATE LIMITED



## SPL-FRLS-44

# LOW SMOKE LOW HALOGEN HIGH FLAME RETARDANT COMPOUND

### **Description**

**SPL-FRLS-44** is a Low Smoke, Low Halogen, High Flame Retardant Compound for Sheathing / Jacketing applications in a wide variety of cables. **SPL-FRLS-44** is formulated with a high quality resin with special plasticier, stabilizers and flame retardant chemicals. Smoke and HCL absorbers are added so that emission of smoke and HCL are limited to low levels when the cable burns.

### **Specifications**

Cables manufactured with SPL-FRLS-44 according to standard technology meet IEC 60502 ST<sub>2</sub>, IS : 5831 and IEC 60332-3 CAT.C applications.

## **Properties**

Property	Test Method	Unit	Typical Value
Density	ASTM D 792	g/cm <sup>3</sup>	1.57
Durometer Hardness	ASTM D 2240	Shore A	91
Tensile Strength	IEC 60811-1-1	MPa	14
Elongation	IEC 60811-1-1	%	210
Variation of Tensile Properties after Heat Ageing at 100°C / 7 days			
Tensile Strength	IEC 60811-1-2	%	- 8
Elongation	IEC 60811-1-2	%	- 12
Limiting Oxygen Index	ASTM D 2863	%	32
Temperature index	ASTM D 2863	° C	280
Halogen Acid Gas Generation	IEC 60754-1	%	17
Smoke Density Rating	ASTM D 2843	%	<50
Hot Deformation Test 90°C, 6 Hrs	IEC 60811- 3-1	%	36
Loss of Mass @ 100 <u>+</u> 2 <sup>0</sup> C, 7 Days	IEC 60811-3-2	mg/cm <sup>2</sup>	1.1
Thermal Stability @ 200 <u>+</u> 0.5 <sup>0</sup> C	IEC 60811-3-2	Minutes	160
Volume Resistivity	ASTM D 257	Ohm-cm	1x10 <sup>14</sup>

 $^{\ast}$  Press Sheet Conditions : 180  $^{\circ}$  C, 10 min, 200kg / cm  $^{2}$ 

\* Data should not be used for specification work

### **Processing Techniques**

**SPL-FRLS-44** can be processed on any good extruder designed for PVC at temperatures in the range of 140<sup>o</sup>C-180<sup>o</sup>C. The screw must have a good homogenizing capacity.

## Colorability

**SPL-FRLS-44** is a Colorable Compound and no detrimental effects on properties in presence of masterbatch colours. We suggest to dry masterbatch before use.

## 2 ##

#### Packaging

**SPL-FRLS-44** is available in the form of free flowing pellets and supplied in bags of moisture resistant material with a net content of 30 Kgs. Material also available in Jumbo Boxes with a net content of 1000 Kgs.

### Storage & shelf life

The product/compound should remain in

- Sealed condition
- Without exposing to direct sunlight and temperature not exceeding 45°C

Shelf life of the compound is 12 months from the date of manufacture.

Product alteration may occur due to extended period of storage.

Shakun accepts no liability of any kind in case the above mentioned storage conditions are not fulfilled.

### Safety

SPL-FRLS-44 is not classified as a dangerous preparation.

The product is supplied in form of pellets of about 3 – 4 mm in size and can be readily handled with commercially available equipment. All handling and transport of the product may generate some dust and fines, which constitute a potential risk for dust explosion. Therefore, all instruments in the system should be properly grounded. Properly designed equipment and good storage will reduce the potential risk. Please, check and follow local disposal regulations!

Inhalation of any type of dust may irritate the air passages and should be avoided. For hot products: immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.

In case of adverse exposure to melting products formed at elevated temperatures, immediately remove, the affected victim from exposure.

Sweep up spilled granules and place in suitable containers for recycle or disposal. Consult an expert on disposal or recovered material and ensure conformity to local disposal regulations.

The product is intended for industrial use only. A Material Safety Datasheet is available on request. Please contact our Technical Team of SHAKUN POLYMERS PRIVATE LTD., for more details on various aspects of safety, recovery and disposal of the product.

This information is to the best of our knowledge accurate but all recommendations or suggestions are made without guarantee or legal liabilities since the conditions of use are beyond our control. The typical values given do not constitute specification for the product but represent typical analytical values.

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