

# PS-12 FR (ST 2 FR)

## PVC SHEATHING COMPOUND

### Description

PS-12 FR is a Type ST 2 FR Lead stabilized sheathing compound to IS 5831-1984 for Wire and Cable applications. It exhibits good Flame Retardant properties.

### Profile

PS-12 FR (ST 2 FR) is a PVC based compound consisting of carefully selected PVC Resins, Plasticizers, Stabilizers, Lubricants and other Additives. It exhibits good processing features along with Physical and Mechanical properties.

### Specifications

PS 12 FR (ST 2 FR) compound meets IS 5831-1984

### Salient Features

- Good flow properties resulting in smooth extrusion
- Good Physical and Mechanical properties
- Exhibits good Flame retarding property

### Technical Specifications Sheet

| Properties  | Test Method       | Unit               | Typical Value |
|---|-------------------|--------------------|---------------|
| <b>a) Physical</b>                                      |                   |                    |               |
| Density   | ASTM D 792        | gm/cc              | 1.55±0.02     |
| <b>b) Mechanical</b>                                    |                   |                    |               |
| Hardness  | ASTM D 2240       | Shore A            | 90±2          |
| Before Ageing   |                   |                    |               |
| Tensile strength (250mm/min)                            | ISO 10810 Part 7  | N/mm <sup>2</sup>  | Min 12        |
| Elongation at Break (250mm/min)                         | ISO 10810 Part 7  | %                  | Min 200       |
| Change of Properties after heat ageing(7 days at 135°C) |                   |                    |               |
| Tensile strength (250mm/min)                            | ISO 10810 Part 11 | %                  | ±20           |
| Elongation at Break (250mm/min)                         | ISO 10810 Part 11 | %                  | ±20           |
| <b>c) Thermal</b>                                       |                   |                    |               |
| Thermal stability@200°C                                 | ISO 10810 Part 60 | Minutes            | Min 80        |
| Heat Shrinkage @150°C/15 mins                           |                   |                    |               |
| Shrinkage   | ISO 10810 Part 12 | %                  | <3            |
| Loss of Mass in Air Oven @100°C for 7 days              |                   |                    |               |
| Loss of Mass  | ISO 10810 Part 10 | mg/cm <sup>2</sup> | 1.5           |
| Temperature Index                                       | ASTM D 2863       | °C                 | 315           |
| Oxygen Index  | ASTM D 2863       | %                  | 30            |

## Processing parameters

PS 12 FR (ST 2 FR )is an easy to process compound which can be processed on the standard PVC extruders. The recommended temperature for extruding PS 12 FR (ST 2 FR)compound is in the range of 140°C to 180°C. Extra caution must be exerted to see that the processing temperature does not exceed beyond 200°C as this will result in degradation of the material. Pre-drying of the compound is recommended at 70°Cfor 2 hours to obtain smooth processing of the cable and attaining good surface finish on the cable.

## Packaging, Storage & Transport

|           |                   |  |
|-----------|-------------------|--|
| Package   | Net Weight 25 kgs | PP Laminated Bags  |
| Transport | Requirement       | Keep away from the sunshine, rain & soaking during transport, as well as handle gently while carrying. |
| Storage   | Environment       | Clean, dry and ventilated ware house.  |

## Technical Assistance

Our technical team will be available for assistance on request.

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## Disclaimer

The above mentioned recommendations are derived after various trails and checks conducted under different conditions. It is advised that the above stated information must be used as guidelines only. We suggest that the customer conducts their own trails and arrive at the optimum processing parameters which are best suited for their equipment and processing conditions. Sankhla does not take any responsibility for any sort of loss arising due to improper handling or usage of materials supplied.

## Sankhla Vinyl Pvt. Ltd.

#75/2, 2<sup>nd</sup> Floor, Chaitra Court, Above Giria's Electronics Showroom,  
Vani Vilas Road, Basavanagudi, Bengaluru 560 004, India  
Mob: +91-99809 61025 | Email: cmho@sankhlapolymers.com