



## Data sheet

**Granule Type : LSB01 ( Thermoplastic halogen-free fire retardant compound for bedding of cable)**

### Description

Polyolefinic based thermoplastic compound containing a fire retardant system that contributes to give the cable self extinguish properties without halogenidric 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      |
|----------------------------------------------------------------------------------------------------|----------------------------|------------------------|--------------------|
| <b>Density</b>                                                                                     | ASTM D 792 / IEC 60811-1-3 | gr/cm <sup>3</sup>     | 1.49±0.03          |
| <b>Properties before ageing</b><br>Tensile strength<br>Elongation at break                         | IEC 60811-1-1              | N/mm <sup>2</sup><br>% | min 9<br>min 125   |
| <b>Properties after ageing “7days at 100°c”</b><br>Variation of Tensile<br>Variation of Elongation | IEC 60811-1-2              | %<br>%                 | max ±40<br>max ±40 |
| <b>Hardness</b>                                                                                    | ASTM D2240                 | Shore D                | 55±1               |
| <b>Melt Flow Index(150 °C/21.6 kg)</b>                                                             | ASTM D1238                 | gr/10min               | 2±0.5              |
| <b>Heat shock test “1 hr at 150°c”</b><br>Result to be obtained                                    | IEC 60811-3-1              | --                     | No Crack           |
| <b>Water absorption</b>                                                                            | IEC 60811-1-3              | mg/cm <sup>2</sup>     | max 10             |
| <b>Cold Bending test</b>                                                                           | IEC 60811-1-4              | --                     | Pass               |
| <b>Cold impact test</b>                                                                            | 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 |                          | 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 :1.2~1.8, L/D= nearly 22**

**Safety**            **LSB01** 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.