

## JLS- FR90H / 90J LSNH Flame Retardant Cable Compound for Jacket / Insulation

### ◆ Application

JLS-FR90H / 90J is applicable for producing medium to low voltage power cord / cable with working temperature at 90°C. It passes VW-1 Vertical Flame Test, and complies with IEC60332-3 Level A and Level B (flame test on bunched wires/cables) with different cable construction. It can be colored directly or by mixing with Polyolefin color masterbatch.

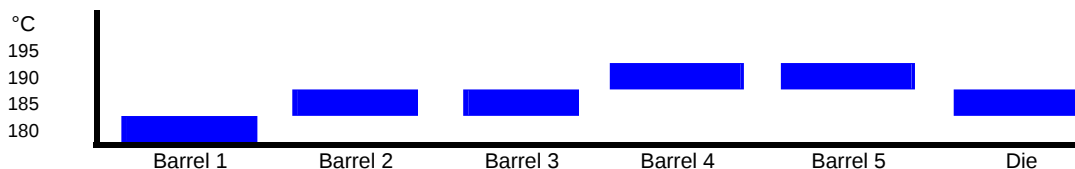
### ◆ Property Parameter

| Item                       |                  | Unit              | Typical Value      |                      | Test Method |
|----------------------------|------------------|-------------------|--------------------|----------------------|-------------|
|                            |                  |                   | 90H                | 90J                  |             |
| Density                    |                  | g/cm <sup>3</sup> | 1.11               | 1.10                 | ISO 1183D   |
| Melt Flow Index            |                  | g/10min           | 2.13               | 2.93                 | ISO 1113    |
| HCL generation             |                  | %                 | 0                  | 0                    | IEC 60754-1 |
| Toxicity Index             |                  |                   | 3.1                | 3.3                  | NES 713     |
| LOI                        |                  | %                 | 38                 | 36                   | ISO 4589    |
| Conductivity               |                  | μS/mm             | 2.6                | 2.6                  | IEC 60754-2 |
| 20°C Volume Resistivity    |                  | Ω.m               | 2×10 <sup>12</sup> | 2.1×10 <sup>12</sup> | IEC 60502   |
| pH Value                   |                  |                   | 6.9                | 6.9                  | IEC 60754-1 |
| Smoke Density              | Non-Flaming mode |                   | 75                 | 79                   | ASTM E662   |
|                            | Flaming mode     |                   | 87                 | 93                   | ASTM E662   |
| Tensile Strength           |                  | MPa               | 14                 | 15                   | IEC 60811   |
| Elongation                 |                  | %                 | 550                | 570                  | IEC 60811   |
| Heat Aging Method          |                  | °C × h            | 125 °C ×168h       |                      | IEC 60811   |
| Change of Tensile Strength |                  | %                 | 10                 | 11                   | IEC 60811   |
| Change of Elongation       |                  | %                 | 7                  | 6                    | IEC 60811   |
| Heat Aging Method          |                  | °C × h            | 110 °C ×168h       |                      | IEC 60811   |
| Change of Tensile Strength |                  | %                 | 9                  | 8                    | IEC 60811   |
| Change of Elongation       |                  | %                 | 5                  | 4                    | IEC 60811   |
| Heat Deformation           |                  | %                 | 18                 | 13                   | IEC 60811   |
| Cold Brittleness ( -25°C ) |                  |                   | Pass               | Pass                 | ISO 974     |

### ◆ Processing Guide

#### 1) Processing Temperature

The recommended temperature range is 180°C-195°C.



#### 2) Extrusion Equipment

It can be processed in ordinary PVC processing machine. NO special screw is required. All kinds of screw combination and tooling are applicable.

### ◆ Storage & Packaging

Store in dry place at ambient temperature. Avoid direct exposure to sunlight, moisture and weathering. If pre-dry is required, place under 80 °C for 2-4 hours. Use as soon as possible after open. Recommend storage period not more than 6 months. Standard packing of 25kg net in multi-layer bags (with PE bag inside).