# Visico™ LE4423/LE4460/ LE4432

Polyethylene

Borealis AG

## Message:

Visico LE4423/LE4460/ LE4432 is a scorch retardant, moisture-crosslinking polyethylene compound for low voltage insulation
LE4423/LE4460/LE4432 is a black, halogen-based flame retardant, moisture-induced crosslinking polyethylene compound that is designed for use as low voltage wire insulation and jacketing. The combination of VISICO LE4423 base resin, along with the LE4460 brominated flame retardant masterbatch and the LE4432 tin catalyst masterbatch provides a highly scorch retardant compound with excellent thermal stability and good flame properties.
LE4423/LE4460/LE4432 contains a patented scorch retardant additive (SRA) that increases the processing window for a moisture crosslinking compound and minimizes the tendency for premature crosslinking in the extruder, head or die.
LE4432 also provides, in addition to catalyst, a stabilization package containing suitable antioxidants, a metal deactivator and a 25% loading of fine particle size carbon black for UV weather resistance. Properly mixed, during the extrusion process, LE4423/LE4460/LE4432 exhibits excellent thermal stability to oxidation. The final insulation or jacketing will also contain 2.5% of suitable carbon black to ensure satisfactory UV weathering stability.

| General Information | |
|---|---|
| Features | Flame Retardant<br>Good Thermal Stability<br>Good UV Resistance |
| Uses | Cable Jacketing<br>Wire & Cable Applications<br>Wire Jacketing |
| Agency Ratings | ASTM D 2655<br>EC 502<br>HD 603 S1<br>HD 604 S1<br>NBN C 33-321<br>NEMA WC-70<br>NEMA WC-71<br>NF C 32-090 |
| Appearance | Black |
| Processing Method | Extrusion |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Specific Gravity | | | ASTM D792 |
| Base Resin | 0.923 | g/cm³ | |
| -- [1] | 1.05 | g/cm³ | |
| -- [2] | 2.00 | g/cm³ | |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 0.90 | g/10 min | ASTM D1238 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Strength (Break) | 16.5 | MPa | ASTM D638 |

| | | | |
|---|---|---|---|
| Tensile Elongation (Break) | 300 | % | ASTM D638 |
| **Elastomers** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Elongation (Break) | 300 | % | ASTM D412 |
| **Aging** | **Nominal Value** | **Unit** | **Test Method** |
| Mechanical Properties After Aging in Air Oven, 121°C, 168 hr (Change in Tensile Strength) | < -10 | % | IEC 60811 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Hot Creep [3] | | | |
| Elongation under load : 150°C | < 50 | % | ICEA T-28-562 |
| Permanent deformation : 150°C | < 5.0 | % | |
| Horizontal Flame Test [4] | Pass | | |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Volume Resistivity | 1.0E+16 | ohms·cm | ASTM D257 |
| Dielectric Constant (60 Hz) | 2.50 | | ASTM D150 |
| Dissipation Factor (60 Hz) | 5.0E-4 | | ASTM D150 |
| **Extrusion** | **Nominal Value** | **Unit** | |
| Cylinder Zone 1 Temp. | 146 | °C | |
| Cylinder Zone 2 Temp. | 163 | °C | |
| Cylinder Zone 3 Temp. | 171 | °C | |
| Cylinder Zone 4 Temp. | 171 | °C | |
| Die Temperature | 177 | °C | |
| **NOTE** | | | |
| 1. | Catalyst | | |
| 2. | Masterbatch | | |
| 3. | 0.20 MPa | | |
| 4. | 14 AWG-30 mil | | |



## Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China