

Solvay Specialty Polymers Cogegum® AFR/765-UV Polyolefin, Unspecified (Unverified Data**)

Category : Polymer , Thermoplastic , Polyolefin

Material Notes:

Cogegum® HFFR -Halogen Free Fire Retardant compound Polyolefin 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. This material complies with RoHS requirements. standard complying - EN 50363-0 M1; EN 50363-7 T16, T17; IEC 60502-1 ST8; Cenelec HD 624.7 S1; Cenelec HD 624.6 S1; VDE 0207 HM2, HM4, HM5, HJ2; BS 7655 LTS2; IEC 60092 SHF1; UNE 21123-4

Additional Information: Tests reported are performed on pressed or extruded specimens Coloring - EVA or PE based masterbatches added at 1.2-1.5% by weight; in order to avoid scotching problems during processing, predrying of colour masterbatch is suggested if moisture absorption occurred during storage (4-6 hours at 50-60°C). Storage - The product must be stored under the following conditions: -- closed and undamaged bags -- ambient temperature not exceeding 35°C -- avoid direct exposure to sunlight and weathering - Product alterations could occur due to extended period of storage - Shelf life: 12 months - Solvay Specialty Polymers accepts no liability of any kind in case the above mentioned conditions are not fulfilled. Packaging - 25 kg moisture-resistant bags on 1375 kg pallet - 1000 kg carton box

Extrusion Notes: Extrusion equipment - standard extruders for thermoplastics equipped with low compression screw (1:1.2-1.4 compression ratio and 20-25 L/D ratio are suggested), and an adequate barrel thermoregulation - don't use screw thermoregulation - filter net: not necessary; in case, use 40-80 mesh/cm² max. Anyway the use of the breaker plate is advisable, in particular using low compression screws

Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Cogegum-AFR765-UV-Polyolefin-Unspecified-nbspUnverified-Data.php

| Physical Properties | Metric | English | Comments |
|---------------------|--|--|--|
| Specific Gravity | 1.52 g/cc | 1.52 g/cc | ASTM D792 |
| ESCR 10% Igepal® | >= 1000 hour @Thickness 3.00 mm, Temperature 50.0 °C | >= 1000 hour @Thickness 0.118 in, Temperature 122 °F | Condition A, Compression Molded; ASTM D1693 |
| Melt Flow | 5.1 g/10 min @Load 21.6 kg, Temperature 150 °C | 5.1 g/10 min @Load 47.6 lb, Temperature 302 °F | Internal Method |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|----------|----------|-----------|
| Hardness, Shore D | 53 | 53 | ISO 868 |
| Tensile Strength at Break | 12.3 MPa | 1780 psi | IEC 60811 |
| Elongation at Break | 190 % | 190 % | IEC 60811 |

| Thermal Properties | Metric | English | Comments |
|----------------------------------|--------|---------|--------------------------------------|
| Maximum Service Temperature, Air | 300 °C | 572 °F | Temperature Index (Burning); NES 715 |
| Oxygen Index | 39 % | 39 % | ASTM D2863 |

| Electrical Properties | Metric | English | Comments |
|------------------------|----------------------|----------------------|-----------|
| Volume Resistivity | 2.60e+12 ohm-cm | 2.60e+12 ohm-cm | IEC 60502 |
| | @Temperature 70.0 °C | @Temperature 158 °F | |
| | 2.20e+14 ohm-cm | 2.20e+14 ohm-cm | IEC 60502 |
| | @Temperature 20.0 °C | @Temperature 68.0 °F | |
| Insulation Resistivity | 10.0 Megaohm/1000 m | 32.8 Megaohm/1000 ft | IEC 60502 |
| | @Temperature 70.0 °C | @Temperature 158 °F | |
| | 800 Megaohm/1000 m | 2620 Megaohm/1000 ft | IEC 60502 |
| | @Temperature 20.0 °C | @Temperature 68.0 °F | |

| Processing Properties | Metric | English | Comments |
|------------------------|--------------|--------------|--------------------|
| Processing Temperature | 150 - 170 °C | 302 - 338 °F | Collar Temperature |
| Zone 1 | 130 - 150 °C | 266 - 302 °F | |
| Zone 2 | 130 - 160 °C | 266 - 320 °F | |
| Zone 3 | 140 - 160 °C | 284 - 320 °F | |
| Zone 4 | 140 - 160 °C | 284 - 320 °F | |
| Die Temperature | 150 - 180 °C | 302 - 356 °F | |
| Head Temperature | 150 - 170 °C | 302 - 338 °F | |

| Descriptive Properties | Value | Comments |
|------------------------|---------------|-------------------------|
| Availability | Asia Pacific | |
| | Europe | |
| | North America | |
| Bending Test | Pass | -25°C; IEC 60811 |
| Calorific Potential | 15.7 MJ/kg | ISO 1716; Upper (gross) |
| Cold Impact | Pass | IEC 60811; -25°C |

| Corrosive Gas in Smoke Descriptive Properties | < 10.0 μ S/mm Value | Conductivity IEC 60754-2 Comments |
|--|----------------------------|---|
| | pH > 4.30 | |
| Features | Flame Retardant | |
| | Good UV Resistance | |
| | Halogen Free | |
| | Low Smoke Emission | |
| | Low Toxicity | |
| | Self Extinguishing | |
| Generic | Polyolefin, Unspecified | |
| Halogenidric Acid Emissions | < 0.10% | |
| Heat Shock | Pass | IEC 60811; 150°C |
| Hot Pressure Test | < 50% | 90°C; max penetration, K=0.6; IEC 60811 |
| Hydrocarbons Immersion Test, 25°C, 4 hr | -13 | CEI 20-34/0-1; % Change in Tensile Strength |
| | 16 | CEI 20-34/0-1; % Change in Tensile Elongation |
| Mechanical Properties After Aging in Air Oven, 110°C, 168 hr | -12 | IEC 60811, %Change in Tensile Elongation |
| | 5 | IEC 60811, %Change in Tensile Strength |
| RoHS Compliance | RoHS Compliant | |
| SAE 20 Oil Immersion Test, 70°C, 4 hr | -10 | % Change in Tensile Strength |
| | 5 | % Change in Tensile Elongation |
| Uses | Cable Jacketing | |
| | Low Voltage Insulation | |
| | Wire & Cable Applications | |
| UV/VIS Radiation Exposure Test, 65°C, 750 hr | 5 | % Change in Tensile Strength |
| | 6 | % Change in Tensile Elongation |
| Water Absorption (mg/cm ²) | 2.2 | 100°C; 24 hr; IEC 60811 |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China