

## Solvay Specialty Polymers Cogegum® AFR/960 Polyolefin

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. Features: Flame Retardant; Halogen Free; Low Smoke Emission; Low Toxicity; Self Extinguishing Uses: Cable Jacketing; Low Voltage Insulation; Wire & Cable Applications 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. Additional Properties: Bending Test - IEC 60811 (-25°C): Pass; Calorific Potential - ISO 1716 17.5 MJ/kg; Cold Impact - IEC 60811 (-25°C): Pass; Collar Temperature - 170 to 180 °C; Corrosive Gas in Smoke - IEC 60754-2 < 10.0 µS/mm; Corrosive Gas in Smoke - IEC 60754-2 > 4.30; Halogenidric Acid Emissions - IEC 60754-1 < 0.10 %; Head Temperature - 180 to 190 °C; Heat Shock - IEC 60811 (150°C): Pass; Hot Pressure Test - IEC 60811 (90°C): < 50 %; Insulation Resistance Constant - IEC 60502 (20°C): 4000 Mohm·km; Insulation Resistance Constant - IEC 60502 (90°C): 1000 Mohm·km; Temperature Index (Burning) - NES 715 280 °C; Water Absorption - IEC 60811 (100°C): 1.20 mg/cm<sup>2</sup> Information provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Cogegum-AFR960-Polyolefin.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Cogegum-AFR960-Polyolefin.php)

Physical Properties	Metric	English	Comments
Density	1.44 g/cc	0.0520 lb/in <sup>3</sup>	ASTM D792
Environmental Stress Crack Resistance	>= 1000 hour @Thickness 3.00 mm, Temperature 50.0 °C	>= 1000 hour @Thickness 0.118 in, Temperature 122 °F	Condition A, Compression Molded, 10% Igepal; ASTM D1693
Melt Flow	4.5 g/10 min @Load 21.6 kg, Temperature 190 °C	4.5 g/10 min @Load 47.6 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	50	50	ISO 868
Tensile Strength at Break	12.5 MPa	1810 psi	ASTM D638
Elongation at Break	200 %	200 %	ASTM D638

Thermal Properties	Metric	English	Comments
Oxygen Index	30 %	30 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.70e+14 ohm-cm	2.70e+14 ohm-cm	ASTM D257
	@Temperature 90.0 °C	@Temperature 194 °F	
	1.00e+15 ohm-cm	1.00e+15 ohm-cm	ASTM D257
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Processing Properties	Metric	English	Comments
Zone 1	140 - 160 °C	284 - 320 °F	
Zone 2	150 - 170 °C	302 - 338 °F	
Zone 3	160 - 180 °C	320 - 356 °F	
Zone 4	170 - 180 °C	338 - 356 °F	
Die Cooling Temperature	180 - 200 °C	356 - 392 °F	

Descriptive Properties	Value	Comments
Availability	Asia Pacific	
	Europe	
	North America	
RoHS Compliance	RoHS Compliant	

## Contact Songhan Plastic Technology Co.,Ltd.

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