

**Product:** Genflam® CIC-3 BK  
**Gendon Code:** 2629 (Black)



**Revision Date:** March 31, 2020

Genflam® CIC-3 BK thermoplastic flame retardant low smoke zero halogen compound was designed as a jacket for fire alarm cables that must meet the 2 hour fire endurance test UL 2196 at 1850 F. Groups of such cable must pass the IEEE 383 Cable Tray tests.

**Key Features:**

- High flame retardancy, no dripping
- Excellent processing
- No heavy metals or halogens

**Physical Properties:**

Density:	1.58 g/cm <sup>3</sup>		
Tensile:	2000 psi (typical)		
Elongation:	100% (typical)		
Tear:	21 lbf/in (typical)		
Durometer:	90 Shore A		
Low Temp. Brittle Point:	-45°C		
Deformation, 2000g:	0%@121°C	0%@100°C	0%@90°C

**Electrical Properties:**

Dielectric Constant (DC):	3.53
Dissipation Factor (DF):	9.4 x 10 <sup>-3</sup>

**Combustion Properties:**

Limited Oxygen Index (LOI):	38%
Acid Gas:	0.2%

**Heat Aging:**

	7d@100°C	7d@121°C	10d@110°C	30d@110°C	70d@110°C
Tensile Retention	89%	107%	102%	TBD	TBD
Elongation Retention	65%	68%	65%	TBD	TBD

**Fluid Resistance:**

	IRM 902 - 4h@70°C	Diesel - 24h@25°C	IPA - 24h@23°C
Tensile Retention	95%	94%	94%
Elongation Retention	97%	96%	88%

**Weathering:**

720 Hours under QUV Testing

Tensile Retention	TBD
Elongation Retention	TBD

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**Suggested Running Conditions:**

Extruder L/D:	20:1 or 25:1	Comp. Ratio:	1.25:1	Screen Pack:	20 Mesh or none
Screw Type:	Single Flight metering, without mixing section				
Feed Zone:	250°F	Center Zone:	300-320°F	Head/Die:	350°F
Conductor Preheat:	165°F	Die Cooling:	Not recommended		
Gradient Cooling:	Not recommended	Color Concentrate:	Not recommended		

**Processing Techniques:**

Genflam CIC-3 Zero Halogen compound is designed to process easily, with a smooth extrudate.

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