

**Product:** Genflam® OH-SD BK  
**Gendon Code:** 4105 (Black)  
P18105 T11 (Black)



**Revision Date:** Sept 24, 2019

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Genflam® OH-SD BK thermoplastic flame retardant low smoke zero halogen (LSZH) compounds are designed to process easily on standard extruders used in the production of wire and cable products. These materials are designed to process similar to elastomeric compounds, attaining maximum output levels at relatively low shear rates. The material can be extruded using either pressure or sleeving techniques. For generation of optimum physical properties, a draw down ratio of 1.25:1 can be used. All materials are supplied as free flowing pellets, packaged in sealed foil lined boxes and do not need to be dried prior to use.

**Key Features:**

- Ease of Processing
- Excellent Flame Performance
- No heavy metals or halogens – UL2885 compliant
- Excellent physical properties
- Colourable version available

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**Physical Properties:**

Density:	1.51 g/cm <sup>3</sup>
Tensile:	1600 psi (typical)
Elongation:	250% (typical)
Durometer:	98 Shore A
Low Temp. Brittle Point:	TBD
Deformation, 2000g:	14% @ 100°C

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**Combustion Properties:**

Limited Oxygen Index (LOI):	37%
Smoke Index (ASTM E662):	D <sub>s4</sub> D <sub>m20</sub>
• Flaming	TBD TBD
• Non-Flaming	TBD TBD

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**Heat Aging:**

	<u>7d @ 100°C</u>
Tensile Retention	96%
Elongation Retention	94%

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**Fluid Resistance:**

	<u>IRM 902 – 4h@70°C</u>
Tensile Retention	80%
Elongation Retention	59%

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**Suggested Running Conditions:**

Extruder L/D:	20:1 or 24:1	Comp. Ratio:	1.25:1	Screen Pack:	20 Mesh or none
Screw Type:	Single Flight metering, without mixing section				
Feed Zone:	300°F	Center Zone:	325-340°F	Head/Die:	350°F
Screw Cooling:	165°F	Die Cooling:	Not recommended		
Gradient Cooling:	Not recommended	Color Concentrate:	EVA Binder preferred		

**Processing Techniques:**

Genflam® OH-SD BK has been designed to process easily on standard extruders used in the production of wire and cable products. This material has been designed to process similar to elastomeric compounds, attaining maximum output levels at relatively low shear rates. Care should be taken to ensure that screw compression ratio levels are below 1.5:1, and flow restrictions in the crosshead are kept to a minimum. Melt temperature values above 420°F (215°C) should be avoided. The material can be extruded using either pressure or sleeving techniques. For generation of optimum physical properties, a draw down ratio of 1.25:1 can be used.

The material is supplied as free flowing pellets, packaged in sealed foil lined boxes and do not need to be dried prior to use. It is recommended that the foil liners be resealed after use to prevent outside contamination or water absorption during storage. If the material has been exposed to a high humidity environment, or the foil liner has not been sealed, it is recommended the material be dried for a minimum of 4 hours at 140°F (60°C) in a standard desiccant style dryer prior to use.

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