

Product: HY BK FR
Gendon Code: 9829 (Black)



Revision Date: February 5, 2020

Gendon's 9829 – Flame Retardant Hypalon is a thermoset jacketing compound developed for shipboard cable applications. It has met a number of standard approvals including IEEE 45, UL 1277, ABS (American Builders of Ships) and PLTC (Power Limited Tray Cable) standards on various cable designs.

Key Features:

- Highly flame retardant
- Excellent processing
- Excellent stability yielding long shelf life
- Radiation curable
- RoHS and REACH compliant
- Unique combination of high tensile & elongation

Physical Properties:

Density:	1.52 g/cm ³
Tensile:	1950 psi (typical)
Elongation:	400% (typical)
Low Temp Brittle Point:	-35 °C
Durometer:	80 Shore A
Melt Index:	10 g/10 min.
Hot Set (150 °C):	15% max.

Combustion Properties:

Limited Oxygen Index (LOI):	30%
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Heat Aging:

	<u>7d @ 100°C</u>
Tensile Retention	85%
Elongation Retention	65%

Fluid Resistance:

	<u>IRM 902 – 18h @ 121°C</u>
Tensile Retention	110%
Elongation Retention	67%

Moisture Absorption:

	<u>7 days @ 70°C</u>
Mils Water Absorbed	5.5 mg/cm ²

Suggested Running Conditions:

Extruder L/D:	20:1	Comp. Ratio:	2.5:1 or 3.0:1	Screen Pack:	20/40/60 Mesh
Screw Type:	Single Flight metering with mixing section				
Feed Zone:	300°F	Center Zone:	310°F	Head/Die:	320°F
Screw Cooling:	Not recommended	Die Cooling:	Not recommended		
Gradient Cooling:	Not applicable	Color Concentrate:	Not applicable		

Processing Techniques:

Gendon's HY BK FR 9829 processes easily on a wide variety of equipment. Time to reach a smooth and homogenous matrix is very short and start-up scrap is kept to a minimum. For best performance crosslinking by irradiation at 8 to 10 Mrads is recommended.
