Product: Genflam® MNT BK

Gendon Code: 4303 (Black)



Revision Date: February 4, 2020

Genflam® MNT BK is a CV crosslinked jacket material designed specifically for Transit applications. The Genflam XL-TR has been engineered for very low levels of smoke generation during combustion, yet provides excellent physical and processing properties to allow for maximum extruder output and minimize production costs.

Key Features:

- Highly flame retardant
- Excellent processing
- No heavy metals or halogens

- Very low smoke generation
- RoHS and REACH compliant

Physical Properties:

Density: 1.54 g/cm³

Tensile: 1700 psi (typical)
Elongation: 180% (typical)
Tear: 40 lbf/in (typical)

Durometer: 93 Shore A

Combustion Properties:

Limited Oxygen Index (LOI): 42% Acid Gas: 0.2%

Smoke Index (ASTM E662): D_{s4} D_{m20}

Flaming o 86
 Non-Flaming o 239

Heat Aging:

| | 7d @ 121°C | 7d @ 150°C |
|----------------------|------------|------------|
| Tensile Retention | 139% | 102% |
| Elongation Retention | 92% | 62% |

Fluid Resistance:

Tensile Retention 67%
Elongation Retention 67%

Suggested Running Conditions:

Extruder L/D: 15:1 or 20:1 Comp. Ratio: 1.25:1 Screen Pack: 20 Mesh or none

Screw Type: Single Flight metering, without mixing section

Feed Zone: 200°F Center Zone: 210-230°F Head/Die: 260°F

Screw Cooling: 165°F Die Cooling: Not recommended Gradient Cooling: Not applicable Color Concentrate: Not applicable

Processing Techniques:

The Genflam MNT BK material has been designed to process easily on standard extruders used in the production of wire and cable products. The 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 temperatures higher than 230°F should be avoided.

The material can be extruded using either pressure or sleeving techniques. For maximum physical properties, tooling utilizing a slight draw down ratio (1.15 to 1) can be used.

The material is supplied as free flowing pellets, packaged in sealed foil lined boxes and does 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 $140^{\circ}F$ (60 °C) in a standard desiccant style drier prior to use