

Product: Genflam® XLMC-H1
Gendon Code: 4801 (Black)



Revision Date: Sept 24, 2019

Genflam® XLMC-H1 moisture cure compound is a 2 part system, the addition of 5 parts catalyst to 95 parts graft/FR will result in a jacket with excellent thermo-oxidative stability, good fluid resistance and excellent physical properties. The material processes easily on standard extruders used in the production of wire and cable products; it will perform best on a mixing screw, with a low shear distributive mixing section.

Key Features:

- Good processibility
- Excellent physical properties
- Excellent flame performance

Physical Properties:

| | |
|--------------------------|------------------------|
| Density: | 1.36 g/cm ³ |
| Tensile: | 1900 psi (typical) |
| Elongation: | 185% (typical) |
| 100% Modulus: | 1800 psi (typical) |
| Hot Creep @ 150°C: | 13.5% |
| Hot Set @ 150°C: | 1.2% |
| Low Temp. Brittle Point: | -50°C |

Combustion Properties:

| | |
|-----------------------------|-----|
| Limited Oxygen Index (LOI): | 32% |
|-----------------------------|-----|

Heat Aging:

| | 7d @ 121°C | 7d @ 158°C |
|----------------------|------------|------------|
| Tensile Retention | 112% | 91% |
| Elongation Retention | 105% | 85% |

Fluid Resistance:

| | IRM 902 – 4h@100°C | IRM902 – 18h@121°C | Diesel – 24h@49°C | Diesel – 24h@100°C |
|----------------------|-----------------------|-----------------------|----------------------|-----------------------|
| Tensile Retention | 70% | 52% | 85% | 48% |
| Elongation Retention | 80% | 69% | 93% | 80% |

Suggested Running Conditions:

| | | | | | |
|-------------------|---|--------------------|---------------------|--------------|-----------------|
| Extruder L/D: | 20:1 or 24:1 | Comp. Ratio: | 1.25:1 | Screen Pack: | 20 Mesh or none |
| Screw Type: | Mixing screw, with low shear distributive mixing section. | | | | |
| Feed Zone: | 300°F | Center Zone: | 320°F | Head/Die: | 340°F |
| Screw Cooling: | Not recommended | Die Cooling: | Not recommended | | |
| Gradient Cooling: | Not recommended | Color Concentrate: | PE Binder preferred | | |

Processing Techniques:

Genflam® XLMC-H1 moisture cure compound is a 2 part system, the addition of 5 parts catalyst to 95 parts graft/FR will result in a jacket with excellent thermo-oxidative stability, good fluid resistance and excellent physical properties. The material will process easily on standard extruders used in the production of wire and cable products. It will perform best on a mixing screw, with a low shear distributive mixing section. Melt temperatures higher than 375°F (190°C) should be avoided.

It is supplied as free flowing pellets, packaged in sealed foil lined boxes and has a shelf life of 1 year when stored between 50-85°F (10-30°C) in its unopened, original packaging. Pre-drying for 4 hours at 140°F (60°C) immediately prior to extrusion is recommended. The foil lined bags must be properly resealed between uses, as even short periods of storage in humid conditions may cause scorch during extrusion.

Crosslinking Conditions:

Genflam® XLMC-H1 can be crosslinked by exposed to low pressure steam at temperatures up to 175°F (80°C). The time period may vary due to thickness of insulation, reel size and temperature.

| <u>Thickness</u> | <u>Time</u> | <u>Conditions</u> |
|------------------|-------------|-----------------------------------|
| 0.5 mm | 4h | 165°F (75°C), 100% Humidity Sauna |
| 2 mm | 18h | 165°F (75°C), 100% Humidity Sauna |
