

GVP Pro 2.0 HFO

TECHNICAL DATA SHEET



UES Report ER-917

Product Use and Design:

GVP Pro 2.0 HFO is a 2.0-pound spray applied closed cell insulation system. This product is formulated for use as an interior and specific exterior insulation system with a broad processing range for ease-of-use by contractors.

| PHYSICAL PROPERTIES | | | |
|---------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------|
| ASTM D1622 | Density | 2.0 lb/ft ³ | 8.0 kg/m ³ |
| ASTM C518 | Aged Thermal Resistance (R-value) | 7.2 ft ² h°F/BTU per inch @ 1" 7.1 ft ² h°F/BTU per inch @ 3.5" and above | |
| ASTM D8485 | VOC Re-entry | 1 Hour at 10 ACH | |
| ASTM D8485 | VOC Re-occupancy | 1 Hour at 10 ACH | |
| ASTM 6226 | Closed Cell Content | >96% | |
| ASTM D2126 | Humid Aging 158°F / 97% RH 168 Hours | <1.4% | |
| ASTM E283 | Air Permeance | <0.0186 L/sec per M ² @ 1.0" | |
| ASTM E96 | Water Vapor Permeance @ 1.1" | 0.98 US Perms; 1.08 US Perm Inches | |
| ASTM D1623 | Tensile Adhesion | 46 PSI | |
| ASTM D1621 | Compressive Strength | 20.0 LBF/in ² | |
| ASTM D2842 | Water Absorption | 0.54% | |
| ASTM C1338 | Fungal Resistance | Pass: no growth present | |
| ASTM C1029-20 | Types I, II, III, IV Standard Specification | Compliant | |

| FIRE TEST RESULTS | | |
|-------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| ASTM E84 | Steiner Tunnel | FS ≤10; SDI ≤300 |
| NFPA 259 | Cone Calorimeter | 1,850 BTU/in ² /in |
| ASTM E1354 | Cone Calorimeter | Total 20.8 MJ/M ² , Peak 60.8 KW/M ² |
| ASTM D970 | Floor Calorimeter | Pass |
| AC377 | Appendix X | Pass: walls 6" ceiling 8" |
| NFPA 286 | Spray Applied Thermal Barrier | Pass: walls 7" ceiling 10"; IFTI DC315 at 14 wet / 8 dry mils Pass: walls 7" ceiling 10"; No-Burn ThB Spray Seal at 16 wet mils |
| NFPA 285 | Base Wall Assembly | Pass: Non-Combustible Exterior Cladding; Contact GVP for details |
| ASTM E119-22 | Load Bearing Assembly (1 Hour Wall) | Fire Resistance Rating: 60 minutes; Contact GVP for details |

| LIQUID COMPONENT PROPERTIES* | | |
|------------------------------|------------------------|----------------------------------|
| PROPERTY | PMDI | GVP Pro 2.0 HFO RESIN |
| Color | Brown | Light Golden Brown to Dark Brown |
| Viscosity | 180 – 200 cPs @ 25°C | 400 – 600 cPs @ 25°C |
| Specific Gravity | 1.23 g/cm ³ | 1.2 g/cm ³ |
| Shelf Life (properly stored) | 12 Months | 6 Months |
| Storage Temperature | 50 – 100°F | 50 – 90°F |
| Mixing Ratio (Volumetric) | 1:1 by Volume | 1:1 by Volume |

| REACTIVITY PROFILE | | | |
|--------------------------|------------------------|------------------------------|---------------------------|
| Cream Time ~2 seconds | Gel Time ~4 seconds | Tack Free time ~6 seconds | End of Rise ~7 seconds |

| RECOMMENDED PROCESSING PARAMETERS | | |
|---------------------------------------------|------------------------------------------------------------------------------------|-------------------|
| Parameter | Recommended Starting Point* | Range |
| Initial Recirculating Setpoint Temperature | <100°F | |
| Initial Primary Heater Setpoint Temperature | 115°F A/B | 100°F – 135°F A/B |
| Initial Hose Heat Setpoint Temperature | 115°F | 100°F – 135°F |
| Moisture Content of Substrate | <19% moisture content | |
| Recommended Material Temperatures | 75°F—95°F | |
| Maximum Lift Thickness | Maximum single pass thickness is 4”; additional 4” pass may be applied immediately | |

| Product Formulation | WINTER | | REGULAR (W) | | SUMMER | |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Substrate Temperature | 20°F – 40°F | 40°F – 70°F | 30°F – 70°F | 70°F – 90°F | 50°F – 70°F | 70°F – 110°F |
| Initial Setpoint Temp. Hose/A/B | 135°F | 130°F | 130°F | 120°F | 130°F | 120°F |
| Setpoint Temp. Range Hose/A/B | 130–135°F | 120–135°F | 125–135°F | 115–125°F | 120–135°F | 100–120°F |
| Initial Pressure | 1200psi | 1200psi | 1200psi | 1200psi | 1200psi | 1200psi |
| Pressure Range | 1000–1300psi | 1000–1300psi | 1000–1300psi | 1000–1300psi | 1000–1300psi | 1000–1300psi |
| Material Temp in the Drum/Tank | 75–95°F | 75–95°F | 75–95°F | 75–95°F | 75–95°F | 75–95°F |

General Requirements:

Polyurethane foam systems should be processed through commercially available spray equipment by a qualified professional applicator. Industry standard safety precautions and procedures regarding proper personal protective equipment and ventilation are required. Equipment must be capable of maintaining a 1:1 by volume ratio (+/- 2%) of polymeric isocyanate (PMDI) and polyol resin blend within the recommended processing parameters. Substrates should be clean, dry, and sound. No residue, oil, grease or excess dust should be present on the substrate, and moisture content of the surface should be below 19%.

Disclaimer:

The information herein is provided to assist customers and contractors in determining whether the product is suitable for their applications. Customers and contractors should test and evaluate the product to determine its fitness of use. All physical properties were determined by lab samples; field samples may vary slightly. This product as produced complies with all of Green Valley Products’ quality control standards. Green Valley Products assumes no responsibility for coverage, performance, or injuries resulting from use. Liability if any is limited to the replacement of product proven to be defective. The applicator assumes the responsibility to confirm fitness of use and proper installation. No guarantees or warranties expressed nor implied, statutory by operational law or otherwise, including fitness of use or potential use are issued with this product. The foam product is combustible and must be protected in accordance with applicable codes.

