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

*See SDS for more information

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	70°F—90°F (reference Application Guide for seasonal variation)	
Maximum Lift Thickness	Maximum single pass thickness is 4”; additional 4” pass may be applied immediately	

Additional Processing Information:

Product	Substrate Temperature	Heaters (Lower Substrate Temps require Higher Processing Heat)	Pressure
Regular	40°F – 65°F	135°F – 120°F A/B/Hose	1000—1250 psi Spray Pressure
	60°F – 120°F	125°F – 100°F A/B/Hose	1000—1250 psi Spray Pressure
Winter	20°F – 70°F	135°F – 120°F A/B/Hose	1000—1250 psi Spray Pressure

*See Application Guide for more information. Recommended processing parameters are dependent on ambient conditions and substrate temperatures.

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.

701 Spinks Rd #400
Lewisville, TX 75067
Phone: (972) 420-4420
www.greenvalleyproducts.com