

GVP 500 OC NM

TECHNICAL DATA SHEET



UES Report ER-910

Product Use and Design:

GVP 500 OC NM is a **true no-mix product** formulated for both drum and bulk delivery. This product was developed for both high-performance and ease-of-use for the contractor with a broad processing window, outstanding 1 hour re-entry & re-occupancy ratings, and a low pH for safer handling and better shelf-life.

PHYSICAL PROPERTIES		
ASTM D1622	Density	0.50 lb/ft ³ ; 8.0 kg/m ³
ASTM C518	Aged Thermal Resistance (R-value)	3.9 ft ² h°F/BTU per inch @ 1" 3.8 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	Open Cell Content	>96%
ASTM D2126	Humid Aging 158°F / 97% RH 168 Hours	<8.3%
ASTM E283	Air Permeance	<0.02 L/sec per M ² @ 3.5"
ASTM E96	Water Vapor Permeance @ 3.5"	7.54 US Perms; 26.72 Perm Inch
ASTM D1623	Tensile Adhesion	3.1 PSI
ASTM D1621	Compressive Strength	1.01 LBF/in ²
ASTM C1338	Fungal Resistance	Pass: no growth present

FIRE TEST RESULTS		
ASTM E84	Steiner Tunnel	FS ≤20; SDI ≤200
NFPA 259	Cone Calorimeter	<2,000 BTU/M ²
ASTM E1354	Cone Calorimeter	Peak 96.8 KW/M ²
ASTM D970	Floor Calorimeter	Pass
AC377	Appendix X	Pass: walls 10" ceiling 16"; DC315 at 6 wet / 4 dry mils
AC377	Appendix U	Pass: walls 15" ceiling 15"
NFPA 286	Spray Applied Thermal Barrier (IFTI DC315)	Pass: walls 6" ceiling 14"; DC315 at 14 wet / 9 dry mils
NFPA 286	Spray Applied Thermal Barrier (No-Burn ThB)	Pass: walls 6" ceiling 14"; ThB Spray Seal at 16 wet mils, also qualifies as a Class 2 Vapor Retarder and protection for UV and weather for up to 6 months
NFPA 285	Base Wall Assembly	Pass; Contact GVP for details
ASTM E119-22	Load Bearing Assembly (1 Hour Wall)	Pass: Fire Resistance Rating 60 minutes; Contact GVP for details
ASTM E119-22	Load Bearing Assembly (2 Hour Wall)	Pass: Fire Resistance Rating 120 minutes; Contact GVP for details

LIQUID COMPONENT PROPERTIES*		
PROPERTY	PMDI	GVP 500 OC NM RESIN
Color	Brown	Greenish Yellow
Viscosity	180 – 200 cPs @ 25°C	170 – 200 cPs @ 25°C
Specific Gravity	1.23 g/cm ³	1.1 g/cm ³
pH		10.8 (10% solution)
Shelf Life (properly stored)	12 Months	6 Months
Storage Temperature	50 – 100°F	50 – 100°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 ~8 seconds	End of Rise ~8 seconds
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RECOMMENDED PROCESSING PARAMETERS*

Parameter	Recommended Starting Point*	Range
Initial Recirculating Setpoint Temperature	<100°F	
Initial Primary Heater Setpoint Temperature	130°F A/B	120°F—145°F A/B
Initial Hose Heat Setpoint Temperature	130°F	120°F—145°F
Initial Processing Pressure	1250—1300 (Setpoint Pressure) 1100—1200 Dynamic (Spray Pressure)	1100—1500 (Setpoint Pressure) 1000—1400 Dynamic (Spray Pressure)
Substrate & Ambient Temperature	30°F and climbing	
Moisture Content of Substrate	<19% moisture content	
Recommended Material Temperatures	75°F—95°F (reference Application Guide for seasonal variation)	
Maximum Lift Thickness	Maximum single pass thickness is 6 inches; additional passes may be applied immediately	

*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%. GVP 500 OC NM is a no-mix product, but mixing the product will not create issues or damage the product.

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.

