



**Product Data Sheet (PDS):**

**GacoFlex™ U91 Series**  
Revised: 05/2026

**GACOFLEX™ U91 SERIES  
SINGLE-COMPONENT MOISTURE-CURE POLYURETHANE COATING**

**A. DESCRIPTION:**

GacoFlex U91 is a single component moisture cure aromatic urethane base coat that exhibits strong adhesion to numerous substrates. GacoFlex U91 produces a tough film that provides robust protection to foam substrates and prevents oil migration on asphalt-based roofs. GacoFlex U91 is not a finish coat and should be top coated with GacoFlex aliphatic urethane, silicone, or acrylic coatings to provide excellent weatherability, UV resistance and high reflectance to promote a cool roof.

GacoFlex U91 is a single-component, moisture-cure polyurethane coating.

**B. RECOMMENDED USE:**

GacoFlex U91 is designed to rejuvenate and extend the life of aged asphaltic, single ply and previously coated roofs. It provides excellent oil migration resistance on asphaltic roofs without the application of bleed blocking primers. It also provides excellent protection for foam roofs due to the tough cured film.

**C. PACKAGED PRODUCT DATA:**

| PROPERTY          | DESCRIPTION   |
|-------------------|---|
| ADHESION          | Exceptional adhesion to GacoFlex GacoPrime LVOC Primer, E5691 Water Reducible Epoxy Sealer/Primer and E5320 2-Part Epoxy Primer/Filler. |
| COLOR             | U9101 - OYSTER  |
| CONSISTENCY       | GacoFlex U91 is thixotropic in nature and has a viscosity of approximately 8000 centipoises.  |
| COVERAGE          | 1 gal / 100 ft <sup>2</sup> (3.8 L / 9.3 m <sup>2</sup> ) yields a Dry Film Thickness (DFT) of 12 mils.                                 |
| SOLIDS            | 80% by volume   |
| STORAGE STABILITY | 12 months at 50 °F – 80 °F (10 °C – 26 °C)  |
| TOXICITY          | Contains a toluene diisocyanate prepolymer.   |
| V.O.C.            | 150 g / L   |
| WEATHERABILITY    | Outstanding weatherability and chalking resistance.   |

**D. PHYSICAL PROPERTIES:**

| PROPERTY                 | ASTM TEST   | STANDARD (MIN)      |
|--------------------------|---|---------------------|
| FLASH POINT              | D56 (Closed Cup)                                      | 100 °F (37 °C)      |
| HARDNESS                 | D2240   | 90 ± 5 Shore A      |
| HARDNESS @ 70 °F (27 °C) | C836  | 77 Shore A          |
| TEAR RESISTANCE          | D624  | 360 pli             |
| TENSILE                  | D412  |                     |
|                          | ELONGATION:   | 350 %               |
|                          | PERMANENT SET AT BREAK:                               | 7 % max             |
|                          | STRENGTH:   | 2600 psi (17.9 MPa) |
| WATER VAPER PERMEABILITY | E-96 PROCEDURE B MAX.100% RH DIFFERENCE @ 73° (23 °C) | 0.02 perm inches    |

**E. APPLICATION:**

| <b>STEP</b>        | <b>INSTRUCTIONS</b>  |
|--------------------|--|
| <b>THINNING</b>    | Thinning is typically required. Use GacoFlex T5112 Thinner for Aromatic Urethanes or GacoFlex T5120 Compliant Thinner for Polyurethanes, but do not thin more than 10% by volume.  |
| <b>MIXING</b>      | Use an electric or compressed-air-powered mixer that will thoroughly agitate the mix. A Jiffy-type mixer has been found to work well with this coating.  |
| <b>POT LIFE</b>    | After 2 hours at 70 °F – 80 °F (21 – 27 °C) and 50% RH, there will be some skinning and an increase in viscosity. Thinning up to 10% with GacoFlex T5112 Thinner for Aromatic Polyurethanes during initial mixing will extend pot life, for a maximum of three hours.  |
| <b>APPLICATION</b> | Refer to Gaco Application Specification for specific instructions and requirements. Sample application would be to prepare the substrate according to Gaco General Instructions “GW-1-1 Surface Preparation” and apply at a rate of 1.25 gal per 100 ft <sup>2</sup> (4.7 L / 9.3 m <sup>2</sup> ) for an approximate Wet Film Thickness (WFT) of 20 mils.<br><br>NOTE: Do not exceed an application rate of 1.5 gal / 100 ft <sup>2</sup> (5.7 L / 9.3 m <sup>2</sup> ) per coat. |
| <b>DRY TIME</b>    | 10-12 hours at 75 °F (24 °C) and 50% RH. Dry time will be faster in warmer and more humid conditions, and slower in colder and dryer conditions.   |
| <b>CLEAN UP</b>    | Clean up application tools and equipment with GacoFlex T5112 or GacoFlex T5120.  |

**F. PHYSICAL PROPERTIES:**

Meets the requirements of Florida Maintenance coating specifications. Applications on single-ply membranes require GacoPrime LVOC Primer prior to applying GacoFlex U91 Polyurethane Coating. For applications over metal and asphalt substrates, priming with GacoFlex E5320 2-Part Epoxy Primer/Filler is recommended.

| <b>PROPERTY</b>   | <b>ASTM TEST</b> | <b>REQUIRED</b>                                      | <b>RESULT</b>              |
|---|------------------|--|----------------------------|
| <b>EXTERNAL FIRE EXPOSURE-FLAME SPREAD</b>                  | ASTM E108        | Class A 1.0 in 12 (metal)<br>Class A 2.0 in 12 (BUR) | Pass                       |
| <b>VOLUME SOLIDS (%)</b>                                    | ASTM D2697       | 50 % min   | 80 %                       |
| <b>INITIAL ELONGATION AT BREAK (%)</b>                      | ASTM D2370       | 100 % min  | 468 %                      |
| <b>AGED ELONGATION AT BREAK (%)</b>                         | ASTM D2370       | 100 % min  | 383 %                      |
| <b>TENSILE STRENGTH</b>                                     | ASTM D2370       | 200 psi (1.3 MPa) min                                | 435 psi (3 MPa)            |
| <b>PERMEABILITY (PERM INCHES) (23C, 100% RH DIFFERENCE)</b> | ASTM D1653       | 50 perm in<br>(1270 perm mm) max                     | 5 perm in<br>(127 perm mm) |
| <b>WATER SWELLING (%)</b>                                   | ASTM D471        | 20 % max   | 12 %                       |

\* For specific Health and Safety information, please refer to Safety Data Sheet (SDS)