

ALT R354 Membrane



Product Data Sheet

Product Description

ALT R354 is a high performance multi-component, fast-curing, methyl-methacrylate resin used in roofing and waterproofing membranes.

Product Use

ALT R354 membrane is produced by combining ALT R304 Basic resin and ALT R350 Flex resin components. ALT R354 Membrane may be applied with ALT Fleece in reinforced systems or without fleece when used as the base layer in ALT Membrane systems. Both applications require addition of ALT Catalyst for polymerization; forming monolithic, self-flashing and self-adhering membranes used for a variety of new construction, refurbishment, and recovery roofing and waterproofing applications.

Standard Color

ALT R354 is supplied in a standard red clay tone resulting from mixing the red-pigmented ALT R350 resin and grey-pigmented ALT R304 Base components.

Packaging

ALT R354 is a combination of the following components:

ALT R304 (base component, 7030) 5-kg drum*

ALT R350 (flex-component, red) 20-kg drum*

*Note: Re-sealable drum with locking ring.

Membrane Coverage Rate (approximate)

ALT R354 base layer (w/o fleece): 0.15 kg/ft² (1.6 kg/m²)

ALT R354 (w/ fleece): 0.33 kg/ft² (3.5 kg/m²)

Gross yield/25-kg pack: +/- 168 ft² (15.6 m²) @ 1.6 kg/m²

Gross yield/25-kg pack: +/- 77 ft² (7.14 m²) @ 3.5 kg/m²

See recommendations for specific applications. Yields will vary depending upon system selected and the smoothness and absorbency of substrate.

Storage

Always store in cool and dry location. Do not store in direct sunlight or in temperatures below 32°F(0°C) or above 77°F(25°C). Approximate shelf life is 12-months when left sealed, unmixed and with proper storage.

Application Conditions

The product can be applied at substrate and ambient temperatures between 37°F (3°C) and 95°F (35°C).

Mixing & Catalyzing

Using a slow-speed mechanical agitator, mix the entire drum of ALT R350 Flex-component while slowly adding the ALT R304 Base-component. Stir the combined components for 2-3 minutes; continue mixing until achieving a uniform streak-free color. Remix before each use, and prior to pouring off resin into a second container if batch mixing. Catalyze only the amount of material that can be used within 15-20 minutes. Add pre-measured catalyst to the combined resin components and stir for 2-minutes using a slow-speed mechanical agitator or stirring stick. The amount of ALT Catalyst added is based ONLY on the weight of ALT R304 Base component used, and not the entire batch weight.

ALT Catalyst required per 1-kg of R304 Base					
20% Catalyst 23°F to 41°F (-5°C to 5°C)		20% Catalyst 41°F to 59°F (5°C to 15°C)		10% Catalyst 59°F to 95°F (15°C to 35°C)	
g	kg	g	kg	g	kg
20	0.02	20	0.02	10	0.01

Working Times (at 68°F (20°C))

- Pot Life: approx. 15-minutes
- Rainproof: approx. 30-minutes
- Next Coat: approx. 1-hour
- Fully Cured: approx. 3-hours

The times noted above are approximate, provided as a guideline, and may vary. Actual set times and cure should be established in the field based on actual field conditions.

Tool Cleaning

When work is interrupted or completed, tools must be thoroughly cleaned with ALT Activator before the resin hardens.

Disposal

Catalyzed and cured resin may be disposed of in standard landfills. Uncured resin is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulations.

Ordering Information

ALT R304 Base component
#172-730-026U summergrade 5-kg drum

ALT R350 Flex component
#158-351-010U summergrade 20-kg drum

Application Guidelines

Handling

Keep away from open fire, flame or any ignition source. Vapors may form explosive mixture with air. Avoid skin and eye contact with this material. Avoid breathing fumes. Do not eat, drink or smoke in area of application. Refer to product Material Safety Data Sheet (MSDS) for additional information pertaining to this product and prior to use or handling.

Personal Protection Equipment

Workers should wear appropriate clothing to protect from accidental skin contact. When mixing or applying this product workers must use butyl rubber or nitrile gloves. Safety glasses with side shields are required for eye protection.

In enclosed spaces, use local exhaust ventilation to maintain worker exposure below TLV. If the airborne concentration poses a health hazard, become irritating or exceeds recommended limits, use a NIOSH approved respirator in accordance with OSHA Respirator Protection requirements under 29 CFR 1910.134. The specific type of respirator will depend on the airborne concentrations. A filtering face piece or dusk mask is not acceptable for use with this product if TLV filtering levels have been exceeded.

Surface Preparation

All substrates must be clean, dry, free of oil, grease, curing compounds, release agents, laitance, gross irregularities, loose, unsound or foreign material such as moss, algae growth, dirt, ice, snow, water or any other condition that would be detrimental to adhesion of resin to the substrate. Apply ALT primer to substrate as required. Refer to ALT "Substrate Preparation & Priming Guidelines" for specific recommendations and requirements. Contact ALT Global Technical Department for recommendations regarding specific applications.

Application (R354 reinforced membrane)

Step 1: After mixing, apply resin to substrate at a rate of 0.19 to 0.26 kg/ft² (2.0 to 2.8 kg/m²) using ALT approved rollers, brushes or notched squeegee. The Resin should be spread evenly onto the surface.

Step 2: Roll ALT Fleece reinforcement directly into the resin, avoiding any folds and wrinkles. Use a roller to work the resin into the fleece, saturating from the bottom up, and apply a supplemental coat of resin as needed directly over the fleece and allowed to cure until solid to touch.

Note the fleece should darken in appearance, with no white spots showing. White spots are indications of unsaturated fleece or lack of adhesion. It is important to correct these faults before the resin cures.

Step 3: Apply an even coat of resin over top of the in-place fleece at a rate of 0.05 kg/ft² (0.5 kg/m²) using ALT approved rollers. Use caution not to spread resin too thin.

Application (R354 un-reinforced membrane)

Step 1: After mixing, apply resin to substrate at a rate of 0.15 kg/ft² (1.6 kg/m²) using ALT approved rollers, brushes or notched squeegee. The Resin should be spread evenly onto the surface. Use caution not to spread resin too thin.

Note: ALT R354 may only be applied un-reinforced when used as the base layer for ALT Membrane Systems. A topcoat of ALT R359 membrane is required to complete the unreinforced roofing and waterproofing membrane.

Surfacing

ALT Global offers a wide variety of optional surfacing treatments for aesthetic, anti-slip or mechanical wear. See individual system specifications for specific guidelines regarding application of topcoats and/or surfacing.

Remarks/Comments

The information provided regarding application of ALT Global products is based on extensive development work, as well as many years of experience, and is given to the best of our knowledge. However, due to the diverse conditions encountered in building construction, it is necessary for the contractor to test the product for its suitability in any given case. We reserve the right to make alterations in keeping with technical developments or improvements.

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