

CARLISLE

SYNTEC SYSTEMS



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LIQUISEAL[®] Liquid Flashing Fleece



Overview

LIQUISEAL Liquid Flashing Fleece is a non-woven, needle-punched polyester fabric reinforcement used with Carlisle's LIQUISEAL Liquid Flashing Resin.

Features and Benefits

- » Improves tear strength
- » Enhances puncture resistance
- » Maintains membrane uniformity
- » Available in various widths

Application

1. Measure area where LIQUISEAL Liquid Flashing Resin will be applied and cut fleece to conform to penetration or flashing area prior to mixing flashing resin.
2. Mix and apply LIQUISEAL Liquid Flashing Resin in strict accordance with instructions.
3. Roll dry polyester fleece onto the liquid resin mix, making sure the SMOOTH SIDE IS FACING UP. Press or roll the fleece into the resin to saturate from bottom up prior to applying additional resin on top of surface.

Review Carlisle specifications and details for complete application information.

Disposal

LIQUISEAL Liquid Flashing Fleece may be disposed of in standard landfills.

Storage

Always store in a cool, dry location. Store flat to avoid deforming rolls and creasing fabric.

Precautions

- » Wear appropriate safety glasses and protect hands and wrists by wearing gloves when working with resin and primers.
- » Fleece must be kept clean and dry prior to and during application.

Typical Properties and Characteristics

Color	White
Physical State	Solid
Thickness (165/200 fleece)	50 mils
Weight (g/m ²)	165
Tensile Strength @ Break	>1,775 lbs
Elongation	>75%
Tear Resistance	>665 lbs.
Puncture Strength	>1,110 lbs.
Flashing Fleece Sizes	13.8" x 164' 27" x 164'

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED[®] Information

Rapidly Renewable Resource	0%
Recycled Content % (post/pre)	0/0
Manufacturing Location	Canada, Germany

LIQUISEAL[®] Liquid Flashing

Accessories

LIQUISEAL Liquid Flashing Spiral Mixing Agitator

Overview

LIQUISEAL Liquid Flashing Spiral Mixing Agitator is a 3" (7.5 cm) steel spiral agitator with a ½" (12.8 mm) hex drive for use with handheld drills and mixers. It is specially designed for mixing LIQUISEAL Liquid Flashing Resins.

Cleanup and Storage

Immediately after use, clean with membrane cleaner. Store dry with other tools and keep from rusting.

Typical Properties and Characteristics

Packaging	2/box
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Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LIQUISEAL Liquid Flashing Concrete & Masonry Preparation Sand

Overview

Carlisle's LIQUISEAL Liquid Flashing Concrete & Masonry Preparation Sand is a kiln-dried #00 – #35 (0.3 – 0.6 mm) graded sand suitable for broadcasting into LIQUISEAL Liquid Flashing Concrete & Masonry Primers for use in substrate preparation.

Do not use standard play sand or any other variety of sand with LIQUISEAL Liquid Flashing products.

Typical Properties and Characteristics

Packaging	50 lb. bag
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LIQUISEAL[®] Liquid Flashing Metal Primer



Overview

Carlisle's LIQUISEAL Liquid Flashing Metal Primer is a quick-curing, high-bonding primer used with acceptable prepared metal substrates or EPDM membranes prior to the application of Carlisle's LIQUISEAL Liquid Flashing Resin. LIQUISEAL Liquid Flashing Metal Primer is a solvent-free, high-solids, two-part, cold-applied liquid polyurethane resin. Each two-component work pack includes Component A (base resin) and Component B (hardener).

Features and Benefits

- » Suitable for a wide range of substrates including bitumen roofing, steel, galvanized steel, aluminum, and EPDM membranes
- » Quick-curing
- » Solvent-free

Coverage Rate

25 FT² (2.3 m²) per 2.2-lb. (1 kg) work pack.

Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

Application

1. Prepare all substrates by removing any irregularities and any loose or foreign material such as dirt, water, grease, oil, lacquers, or release agents. All metal surfaces must be prepared using a grinder. Do not use a wire brush. Ensure that all metal surfaces are ground down to expose bare metal.
2. Remove bag from the aluminum packaging. Knead cream-colored resin (Component A) thoroughly until a uniform color is achieved.
3. Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous primer is formed. The primer should be a uniform color, with no light or dark streaks present.
4. After the primer is mixed, cut off one corner of the bag and pour all primer into a clean, new mixing pail. Working quickly, apply approximately 25 FT² (2.3 m²) per work pack. The primer should be rolled or brushed evenly onto the surface in a cross-directional method to fully cover the substrate in one application. Allow to set for approximately 3 hours or until fully cured prior to application of the LIQUISEAL Liquid Flashing Resin.

Note: LIQUISEAL Liquid Flashing Resin must be applied when the primer is completely dry and without tack. Do not apply LIQUISEAL Liquid Flashing Resin to tacky or wet primer.

Review Carlisle specifications and details for complete application information.

Disposal

Cured LIQUISEAL Liquid Flashing Metal Primer may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components.

Note: Uncured LIQUISEAL Liquid Flashing Metal Primer is considered a hazardous material and must be handled in accordance with local, state, and federal regulations. Do not dispose of uncured resin.

LIQUISEAL Liquid Flashing Metal Primer

Precautions

- » **LIQUISEAL Liquid Flashing Metal Primer is extremely quick-curing. Apply immediately after mixing.**
- » Always store in a cool, dry location between 35°–80°F (1.7–27°C). Do not store in direct sunlight. Approximate shelf life is 12 months with proper storage. Best practice is to store material at 65–70°F (18–21°C) for 24 hours before use.
- » Do not install if ambient temperature is below 40°F (4°C) or above 90°F (32°C).
- » Do not break down work packs into smaller quantities; mix the entire work pack.
- » Prepare all surfaces to be primed before mixing primer. Pot-life will be shorter as ambient temperatures rise.
- » Use appropriate safety glasses and protect hands and wrists by wearing gloves.
- » Avoid contact with eyes and skin. If swallowed, DO NOT INDUCE VOMITING. Call a physician immediately.
- » KEEP OUT OF THE REACH OF CHILDREN.

Typical Properties and Characteristics

Physical Property	Value
Packaging	1.0-kg (2.2 lb.) sachet (.25 gal)
Color	Translucent/amber
Physical State	Cures to solid
VOC Content	3 g/l
Usage Time*	5–10 minutes
Water Resistant After*	2 hours
Cures After*	3 hours
Apply Membrane/Coating After*	3 hours

*Values obtained at 73°F (23°C), 50% relative humidity, may vary depending upon air flow, humidity and temperature.

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information

Rapidly Renewable Resource	60%
Recycled Content % (post/pre)	0/0
Manufacturing Location	Buffalo, NY

LIQUISEAL[®] Liquid Flashing

Concrete & Masonry Primer



Overview

LIQUISEAL Liquid Flashing Concrete & Masonry Primer is a quick-curing, high-bonding primer used with acceptable prepared concrete and masonry substrates and Carlisle's LIQUISEAL Liquid Flashing Resin. LIQUISEAL Liquid Flashing Concrete & Masonry Primer is a solvent-free, two-part, cold-applied liquid epoxy resin. Each two-component work pack includes Component A (base resin) and Component B (hardener).

Features and Benefits

- » Can be used to prime a wide range of masonry substrates
- » Solvent-free and low-VOC

Coverage Rate

19 FT² (1.8 m²) per .25-gallon sachet.

Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

Application

1. Prepare all substrates by removing any irregularities and any loose or foreign materials such as dirt, water, grease, oil, lacquers, or release agents using a grinder. All concrete substrates should be dry and fully cured.
2. Remove bag from the aluminum packaging. Knead translucent yellow resin (Component A) thoroughly until a uniform color is achieved.
3. Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous primer is formed. The primer should be a uniform color, with no light or dark streaks present.
4. After the primer is mixed, cut off one corner of the bag and pour all primer into a clean, new mixing pail. Working quickly, apply at a rate of approximately 19 FT² (1.8 m²) per .25 gallon sachet. The primer should be rolled or brushed evenly onto the surface in a cross-directional method to fully cover the substrate in one application.
5. After applying the primer, immediately broadcast LIQUISEAL Liquid Flashing Concrete & Masonry Preparation Sand into the uncured primer at the approximate rate of 50 lbs./100 FT² (2.4 kg/m²). Allow to set for approximately 4 hours or until fully cured prior to application of the LIQUISEAL Liquid Flashing Resin.
6. In warm climates, higher contents of moisture or vapor within a concrete substrate may cause pin-holing of the primer due to vapor drive. Applying primer later in the day when temperatures are lower can improve this condition.

Note: LIQUISEAL Liquid Flashing Resin must be applied when the primer is completely dry and without tack. Do not apply LIQUISEAL Liquid Flashing Resin to tacky or wet primer.

Review Carlisle specifications and details for complete application information.

LIQUISEAL Liquid Flashing

Concrete & Masonry Primer

Disposal

Cured LIQUISEAL Liquid Flashing Concrete & Masonry Primer may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components.

Note: Uncured LIQUISEAL Liquid Flashing Concrete & Masonry Primer Resin is considered a hazardous material and must be handled in accordance with local, state, and federal regulations. Do not dispose of uncured resin.

Precautions

- » Always store in a cool, dry location between 35–80°F (1.7–27°C). Do not store in direct sunlight. Approximate shelf life is 12 months with proper storage. Best practice is to store material at 65–70°F (18–21°C) for 24 hours before use.
- » Prepare all surfaces to be primed before mixing primer. Pot life will be shorter as ambient temperature rises.
- » Do not install if ambient temperature is below 40°F (4°C) or above 90°F (32°C).
- » Do not break down units into smaller quantities; mix the entire work pack.
- » Use appropriate safety glasses and protect hands and wrists by wearing gloves.
- » Avoid contact with eyes and skin. If swallowed, DO NOT INDUCE VOMITING. Call a physician immediately.
- » KEEP OUT OF THE REACH OF CHILDREN.

Typical Properties and Characteristics

Physical Property	Value
Packaging	.25 gal. (2.83 L) • 1 kg
Color	Translucent/amber
Physical State	Cures to solid
VOC Content	8 g/l
Usage Time* (Pot Life)	20 minutes
Water Resistant After*	3 hours
Cures After*	4 hours
Apply Membrane/Coating After*	4 hours

*Values obtained at 73°F (23°C), 50% relative humidity, may vary depending upon air flow, humidity, and temperature.

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information

Rapidly Renewable Resource	0%
Recycled Content % (post/pre)	0/0
Manufacturing Location	Buffalo, NY

LIQUISEAL[®] Liquid Flashing Resin



Overview

LIQUISEAL Liquid Flashing Resin is a two-component polyurethane-based resin used with LIQUISEAL Liquid Flashing Fleece to create a reinforced, cold-applied liquid flashing. LIQUISEAL Liquid Flashing Resin is compatible with all of Carlisle's single-ply membranes and is UV and color stable, solvent-free, low-VOC, and virtually odorless. Each LIQUISEAL Liquid Flashing Resin work pack includes Component A (white) and Component B (clear), and when thoroughly mixed, will be white in color.

Features and Benefits

- » Can be used to flash oddly shaped or difficult-to-flash penetrations
- » Can be used with all Carlisle single-ply membranes
- » Can be used on various substrates including metal, concrete, and masonry
- » Can be used to tie dissimilar roofing membranes together without building a curb
- » Highly reflective white color

Coverage Rate

13.6 FT² (1.3 m²) per gallon.

Note: All yields are approximate and may vary depending upon smoothness and absorbency of substrate.

Installation

1. Prepare all substrates by removing any irregularities and any loose or foreign materials such as dirt, water, grease, oil, lacquers, or release agents. Ensure that all metal surfaces are ground down to expose bare metal. Prepare membrane by sanding with 60-grit sandpaper.
2. Apply the appropriate primer to membrane and allow to flash off. Apply appropriate primer to all other surfaces to which flashing will be applied. Refer to Carlisle specifications and details for preparation and priming instructions.
3. Cut and prepare all reinforcing fleece before mixing resin.
4. Mix resin (Component A) with a clean spiral agitator until the liquid is a uniform white color. Add hardener (Component B) to Component A and mix with a spiral agitator for 2 minutes or until both liquids are thoroughly blended.

NOTE: For Sachet Packaging

Remove bag from the aluminum packaging. Knead white resin (Component A) thoroughly until a uniform color is achieved.

Pull away the rubber cord separating the two components so that Components A and B can be mixed together. Knead the bag quickly and thoroughly for approximately 1 minute so that a homogenous resin is formed. The resin should be a uniform color, with no light or dark streaks present.

After the resin is mixed, cut off one corner of the bag and pour entire sachet of resin into a clean, new mixing pail. Working quickly, apply at a rate of approximately 13.6 FT² (1.3 m²) per gallon.

5. Using a nap roller or brush, apply two-thirds of the resin evenly onto the substrate using even strokes.
6. Roll the LIQUISEAL Liquid Flashing Fleece directly into the LIQUISEAL Liquid Flashing Resin, ensuring that the SMOOTH SIDE IS FACING UP (natural unrolling procedure) and avoiding folds, wrinkles, and air pockets.
7. Apply the remaining one-third of the resin and use the roller or brush to work the resin into the fleece, saturating from the bottom up. All areas of the fleece should be completely saturated with resin.

Review Carlisle specifications and details for complete installation information.

LIQUISEAL Liquid Flashing Resin

Disposal

Cured LIQUISEAL Liquid Flashing Resin may be disposed of in standard landfills. This is accomplished by thoroughly mixing all components.

Note: Uncured resin is considered a hazardous material and must be handled in accordance with local, state, and federal regulations. Do not dispose of uncured resin.

Precautions

- » Always store in a cool, dry location between 35–80°F (1.7–27°C). Do not store in direct sunlight. Approximate shelf life is 12 months with proper storage. Best practice is to store material at 65–70°F (18–21°C) for 24 hours before use.
- » Do not install if ambient temperature is below 40°F (4°C) or above 90°F (32°C).
- » Do not break down work packs into smaller quantities; mix the entire work pack.
- » Prepare surfaces and pre-cut all fleece before mixing resin. Pot life will be shorter as ambient temperature rises.
- » Use appropriate safety glasses and protect hands and wrists by wearing gloves.
- » Avoid contact with eyes and skin. If swallowed, DO NOT INDUCE VOMITING. Call a physician immediately.
- » KEEP OUT OF THE REACH OF CHILDREN.

Cool Roof Rating Council (CRRRC)

	Initial	Weathered
Solar Reflectance	0.87	Pending
Thermal Emittance	0.90	Pending
Rated Product ID Number		0951-0010
Licensed Seller ID Number		0951
Classification		Production Line

Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary.

Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.

Typical Properties and Characteristics

Physical Property	Test Method	Value
Packaging		0.51 gal. (1.93 L) • 2.5 kg 1.03 gal. (3.90 L) • 5.0 kg
Color		Bright white
Physical State		Cures to solid
Thickness (165 Fleece)		80 mils
VOC Content		2 g/l
Peak Load @ 73°F, avg.	D5147	70 lbf/in.
Elongation	D5147	Min 30%
Tearing Strength	D5147	90 lbf
Puncture Resistance	D5602	56 lbs.
Dimensional Stability	D1204	0.15%
Water Absorption	D570	>1%
Impact Resistance	D2240	Shore A:75
Water Vapor Transmission	E96	0.08 perms
Crack Spanning		2 mm/0.08 in
Short-Term Temperature Resistance		250°C/482°F
Usage Time (Pot Life)*		30 minutes
Water Resistance After*		2 hours
Completely Hardened*		3 days

*Values obtained at 73°F (22.8°C), 50% relative humidity, may vary depending upon air flow, humidity, and temperature.

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information

Rapidly Renewable Resource	70%
Recycled Content % (post/pre)	0/0
Manufacturing Location	Buffalo, NY