

# PUMA™

## SAFETY

CAUTION: HARMFUL IF SWALLOWED. MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION. KEEP OUT OF REACH OF CHILDREN. If spraying, use a dust mask.

First Aid: Eyes – immediately flush with plenty of water, and continue rinsing for at least 15 minutes.

Skin – wash with soap and water, followed by a thorough rinse.

Ingestion – if swallowed, DO NOT INDUCE VOMITING, dilute with one to two cups of water or milk. Immediately contact a poison control center or physician for further instructions.

Inhalation – immediately move to fresh air.

For U.S. Health Hazard Information, call  
(888) 786-0974

## SPECIFIC PRODUCT GUARANTEE

### PUMA

Conklin Company's guarantee to the Independent Business Owner: Conklin Company Inc. guarantees for a period of five (5) years from date of purchase that PUMA is free from any defects in manufacture. This guarantee is limited to replacement of product at the expense of the company when such product proves to be defective in manufacture. Among other things, this guarantee does not apply to coverage failure due to improper application. Proper application includes, but is not limited to the requirements, that PUMA must be applied in a continuous, unbroken (closed seal) film of a dry thickness of not less than 13.5 mils, with a wet thickness of not less than 26 mils. **THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM ANY CAUSE WHATSOEVER. THIS WARRANTY IS IN LIEU OF THE IMPLIED WARRANTY OF MERCHANTABILITY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** This guarantee applies only to the Conklin Independent Business Owner who purchases the product and cannot be extended to any other person.

PUMA (Patent pending) is Conklin's premium one coat Poly-Urethane Modified Acrylic latex coating. PUMA combines the best performance of both urethane and acrylic polymers to create a seamless membrane. This single coat system offers excellent adhesion to spray-in-place polyurethane foam and aged Conklin acrylic coatings, along with higher tensile strength, elongation, toughness and dirt pickup resistance than could be expected from any all-acrylic system.

## **SPECIFICATIONS**

Type of resin	Acrylic/Urethane
Base Coat	Not required for sprayed polyurethane foam.
Color	White
Solids	64% by Weight 53% by Volume
Density	10.9 lbs. /gallon
Thickness	13.5 dry mils
Application temperature	Do not apply at temperatures less than 40° F or during inclement weather
Application method	Airless spray
Dry Time*	2 – 6 hours
Fire Resistance**	Class “A” (UL 790)
Elongation	400% ASTM D-412
Tensile Strength	495 psi ASTM D-412
VOC Content	43 g/l
Shelf life	2 years from the date of manufacture
Storage conditions	Keep containers tightly closed when not in use. Store in a cool place, above 40 °F. Keep from freezing.

\*Dry time for PUMA will vary depending on temperature, humidity, thickness at which the product is applied, and wind. Lower temperature, lower wind speed, higher humidity, or higher wet film thickness will increase the dry time in excess of the reported average.

\*\*Refer to Underwriters Laboratories Roofing Materials and Systems directory for specific fire resistant assemblies or contact the Building Products Division at the Conklin Company.

## APPLICATIONS

### Substrates

PUMA is approved for use over new spray-in-place polyurethane foam, and over aged Conklin acrylic roofing systems.

### Surface Preparation

A coating will perform well only if the surface to which it is applied is properly prepared and clean. The substrate must be structurally sound, solid, clean and dry. On certain decks and surfaces, proper installation of drains, vapor retarders, roofing vents, expansion joints, flashings, and positive slope to drain will be required.

The application surface must be finished, smooth, free of grease, wax, dirt, contaminants, moisture, and other matter which would interfere with adhesion. It must also be free of chips, loose roofing or other foreign matter.

### Cleaning The Roof

High pressure water is the best way to clean a roof – as long as the water will not damage the building or its contents. It does, however, create a wet roof that must be thoroughly dried before the coating is applied.

If poor drainage exists, a dry method of roof preparation is necessary.

On sloped or pitched roofs, clean the surface with a stiff bristle broom and/or high pressure water and Conklin Mox® heavy-duty multipurpose cleaner. On weathered acrylic Conklin roofs, Conklin WAC II weathered acrylic roof cleaner may be used as directed.

NOTE: Inadequate cleaning usually results in poor adhesion of all roof coatings to the substrate. If there are indications that moisture is trapped within the roof, remove all the wet layers and replace them with dry material. The use of moisture detection equipment is highly recommended.

### Polyurethane Foam

PUMA has been designed for new spray-in-place polyurethane foam. Application of the coating should be made no sooner than two hours and no later than 72 hours following the spray-foam application. However, for best results, application should be made the same day as the spray-foam application to avoid foam damage by sunlight.

In any case, follow the polyurethane foam manufacturer's requirements.

In the event that the foam is not coated within 72 hours and damage has resulted, the damaged foam surface must be removed by a stiff bristle broom or scarifier machine and a new layer of polyurethane foam applied. CAUTION: Do not apply PUMA over urethane foam that has been mechanically scarified.

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Polyurethane foam that is off-ratio should also be removed and refoamed before applying PUMA. Off-ratio spray-foam is evident by a brown, glossy structure (high isocyanate) or may feel oily and possibly tacky (high polyol). Do not apply to foam surfaces with a texture of “verge of popcorn,” “popcorn,” or “tree bark” (Refer to the Spray Polyurethane Foam Alliance and/or the NRCA Roofing and Waterproofing Manual for definitions of foam surface texture). Spray-foam surface must be cleaned, free of any dirt or grease, and dry before applying PUMA. Broken or cracked foam, or imperfections in the foam such as tunnels caused by the blowing agents, should be caulked with Conklin Kwik Kaulk® acrylic latex caulking compound before coating.

Spray-foam application should provide at least 1/4:12 slope to drain. PUMA is a white reflective coating and should not be tinted to any color.

### **Eliminating large depressions and ponding areas on flat roofs**

Large depressions and ponding areas (expanses greater than 36 square feet) are not acceptable and must be corrected using one of the following methods prior to the application of the final layer of spray-in-place foam:

1. Spray-in-place foam
2. Drains
3. Crickets
4. Approved tapered boardstock

### **Filling small cracks**

Cracks less than one-fourth inch by one-eighth inch should be filled with Kwik Kaulk acrylic latex caulk to provide a base for a complete membrane seal of PUMA. All remaining joints, cracks and flashing details should be prepared using Conklin’s Bench

Ply or Rapid Ply systems, applied according to instructions. Cracks and holes must be patched, loose substrates removed, damaged surfaces prepared, wet insulation replaced, and vents added (if required) prior to the application of PUMA.

## **METHODS**

PUMA should be applied at a rate of 1.9 gallons per square. This rate assumes approximately 15% for application loss and 10% for surface texture. This is not meant to represent an absolute rate, but is a starting point to assist in the bidding of a job. Under very irregular roofing substrate conditions, more product may be required. Most importantly, PUMA must be applied in a continuous, unbroken film of a dry thickness of no less than 13.5 mils over the entire roof.

If roofing granules are to be used, they MUST be embedded using a second application of PUMA at a rate of 1.0 gallons per square, and at a quartz roofing granule rate of 50 pounds per square.

### **Airless spray equipment**

PUMA® can be applied with airless spray equipment. It is necessary to move the coating into the small seams and cracks to achieve a continuous membrane. A spray tip orifice of .024 – .035 inches is recommended at a minimum 2,500 psi fluid pressure. When spraying PUMA®, store materials in a warm environment, 60 F or above. Cold material causes difficulty when spraying.

## **QUALITY INSPECTION**

After applying Conklin acrylic roof systems remember:

The quality of application is always of utmost importance. Check the application for pinholes or fissures in the coating. These must be patched or filled using Kwik Kaulk, and then re-coated with PUMA.

Do not walk on the coating until complete curing takes place.

## **ADVERSE WEATHER APPLICATION**

### **Moist conditions**

Since PUMA is water based, it requires complete evaporation of water to cure. **DO NOT APPLY CONKLIN ROOF COATING PRODUCTS BEFORE OR DURING RAIN, DEW, FOG, FREEZING TEMPERATURES OR OTHER CONDITIONS THAT WILL NOT PERMIT COMPLETE CURING.**

## **CLEAN UP**

While the coating is still wet, clean yourself, tools and the area with water. If the coating is not fully dry, it can easily be removed with a solution of Mox® heavy-duty multipurpose cleaner and water.

## **GENERAL CAUTIONS AND SAFETY REQUIREMENTS**

1. Always follow the directions that accompany Conklin acrylic roof coating products.
2. Uncured coatings, loose granules and cured coating that has become wet from rain, dew or other causes are extremely slippery. Care should be taken when walking on coating or granules.
3. Sunglasses are recommended for application and inspection of coating to ease potential eye strain due to the brightness of the coating.

## **LIMITATIONS**

1. Do not apply Conklin roof coating systems to a surface that is wet, dirty or has a structurally unsound substrate.
2. PUMA shall not be applied to foam surfaces with a texture of “verge of popcorn,” “popcorn,” or “tree bark.”
3. Do not store any Conklin acrylic roof coating at temperatures less than 40° F. Do not apply at temperatures below 40° F, when temperatures may drop below 40° F within 24 hours, or when the temperature is not at least 5 F above the dew point. Do not apply during inclement weather, when precipitation appears imminent, or when freezing may occur before the membrane is fully cured.
4. Coating applications should not be started during inclement weather, when precipitation appears imminent, during high humidity or when freezing may occur before the coating can cure.
5. Coating shall not be applied to surfaces without adequate slope for drainage to eliminate ponding water.
6. Suitable service walkways shall be provided as indicated by Conklin specification sheets.
7. Application shall not be used in interior settings where a thermal barrier is required.
8. Coating shall not be applied directly to unacceptable surfaces.
9. Coating application shall be limited to the decks and substrates indicated herein.
10. PUMA is not designed to be tinted directly.
11. Coating shall not be applied to foam over refrigerated tanks or buildings where a vapor barrier coating is required.
12. Coating application shall be limited to above-ground approved substrates.