

ISI - ACR



Product Type: Material as provided is designed as a single component, high-body, 60% solids emulsion polymer, based on pure elastomeric acrylic resins for spray, brush, or roller application.

General Properties: This product provides outstanding weatherability, as well as exceptional protection from degradation caused by ultraviolet exposure.

Recommended Uses: This product is a general-purpose roof coating. Excellent adhesion will be achieved over polyurethane foam, concrete, masonry, primed metal, primed wood, and primed asphalt. This product may be used as a base coat/top coat roofing system, or may be used as a topcoat over urethane or butyl coatings. Contact Integrity Supply Inc. for specific application information.

Product Limitations: Because both colder temperatures and high humidity retard the curing process, there must not be any moisture present on the surface whatsoever. Therefore, we do not recommend application on flat roofs where ponding water is present or during early morning or late afternoon hours when conditions are conducive to high moisture condensation. In addition, this product is not recommended for use without a vapor barrier in cryogenic tank or cold storage roofing applications. ISI – ACR is not intended to be used in any interior application in place of a thermal barrier.

Drying Time: Dependent upon temperature, relative humidity and wet film thickness.

Ponding Water:

- **Integrity Supply Inc. Warranties do not cover damage due to ponding water.**
- The National Roofing Contractors Association considers ponding water on any roof unacceptable. (See the NRCA Roofing and Waterproofing Manual).

PRODUCT CHARACTERISTICS

VOC: < 50 Grams / Liter (EPA Method 24)

PERFORMANCE CHARACTERISTICS

ISI – ACR has been independently tested and certified to meet or exceed all the requirements of ASTM D-6083 Standard Specification Liquid-Applied Acrylic Coating used in Roofing.

PHYSICAL PROPERTIES:

Tensile Strength:	250 PSI ± 25	(ASTM D-412)
Elongation:	300% ± 25	(ASTM D-412)
Reflectivity (White)	80%	(ASTM C-1549)
Emissivity (White)	.85	(ASTM C-1371)
SRI Value:	99	Calculated
Permeability:	3.0 perms at 20 mils	(ASTM E-398)
Specific Gravity:	1.44	
Durometer Hardness:	50± 5 points Shore A	(ASTM D-2240)
Solids Content By Weight:	70%	(ASTM D-1644)
Solids Content By Volume:	60%± 4%	(ASTM D-2697)
VOC:	< 50 Grams / Liter	EPA Method 24
Maximum Temperature:	Continuous Service 185°F (85 °C)	
Flash Point	None to 212 °F	(ASTM D-1310)
Weathering/UV Resistance:	No degradation after 6,000 hours	(ASTM G-53)

Cure Time:	4-8 Hours	Dependent upon Temperature and Relative Humidity
Drying Time:	1 hour at 77°F	"Same as above"
Shelf Life:	(UNOPENED CONTAINERS): 6 Months	When stored between 35°F and 75°F.

STORAGE CONDITIONS: THIS PRODUCT, BECAUSE IT IS WATER-BASED, MUST NOT BE APPLIED OR STORED IN FREEZING CONDITIONS.

ORDERING INFORMATION:

This product is available in 5-gallon pails, and in 55-gallon drums.

Color: White, Lt. Grey, Dk. Grey, Tan

Contact **Integrity Supply Inc.** for availability, lead times, and pricing for special colors.

Shipping Information:

<u>Container Size</u>	<u>Class</u>
5 Gal (18.9 Liter)	55
55 Gal. (208.2 Liter)	55

D.O.T. Classification: **Roof Coating, Not Regulated**

HMIS® Rating:

Health	1
Flammability	0
Reactivity	0
Protection	X

0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

APPLICATION PROCEDURES

Do Not Thin

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SURFACE PREPARATION: All surfaces to be coated must be clean, dry, and paintable. It may be necessary to power wash and/or prime to enhance adhesion. See application specification for more details.

THINNING: This product is supplied ready-to-use. No thinning is needed or recommended.

Mixing Procedures: No thinning or reducing is necessary. Product may separate after shipping and storage, though it may still look mixed. When mixing becomes necessary we recommend the use of a 3/4 horsepower or larger electric or air operated mixer with a blade capable of uniformly mixing the entire container. When product is in 5-gallon pails, use a 3" minimum diameter-mixing blade. When product is in drums, use a 6" minimum diameter-mixing blade.

WEATHER RESTRICTIONS: This product cures by water evaporation only. It is very important that this product is not used when weather conditions are below 50°F. or when there is a chance that the temperature could fall below 32°F within a 24 hour period after application. We also do not recommend application of this product if rain or dew is likely to occur before drying of product. Late afternoon application is not recommended if high humidity conditions exist, that could cause high moisture concentration of the surface overnight. Thin coat applications will dry faster for those marginal spray days when the best drying conditions are not possible, especially during cooler weather when overnight temperatures could fall below 32°F.

Drying time is temperature, humidity, and film thickness dependent.

If ambient temperatures drop below 65°F, it may be necessary to heat the material.

APPLICATION EQUIPMENT: This product may be sprayed, brushed, or rolled. When using spray equipment, it is important that the following criteria are met: When using a spray pump, a 30:1 or 45:1 fluid to air ratio capable of delivering 2 1/2 gallons or more per minute continuous is needed, as well as a filter screen of 30 mesh or larger. The fluid spray hose should be high pressure with designed working pressure to handle maximum pressure delivered by the spray pump. Inside lining or tube should be of such a material that is unaffected by the coating or soaps used for clean up.

Additionally, the following criteria should be used for hoses: 3/8 minimum I.D. up to 75 feet; 1/2 minimum I.D. up to 200 feet; and 3/4 minimum I.D. over 200 feet. Material temperature should be 70°F. or higher. The larger I.D. sections of hose should be used from the pump out in all circumstances. If a gun hose whip is used, high pressure with adequate W.P.S.I 3/8 I.D. X 6 feet with an appropriate lining or tube is recommended. When using a spray gun, we recommend the Graco Hydra Mastic or equivalent. High-pressure gun swivels are available and can reduce operator fatigue. Any spray tip should be a reversible self-cleaning type with an orifice size of .027 to .039 with a fan angle of 40 to 50 degrees. Always use components rated for pump pressures. Specific recommendations for equipment may be obtained from **Integrity Supply Inc.**

APPLICATION PROCEDURES: This product may be applied directly to any clean, dry surface. Polyurethane foam should be coated within 24 hours of application. Subsequent coats should be applied within 24 hours of prior applications to insure full and uniform adhesion.

Before applying a subsequent coat the previous coat must be completely dry and cured. If any contamination of a thoroughly cured surface occurs, it must be washed with a chemical cleaner before applying subsequent coats. Coating must be extended beyond the substrate to create a self-terminating flashing. Consult **Integrity Supply Inc.** for recommended dry film thickness.

Please consult **Integrity Supply Inc.** Technical Department for any specific questions regarding the application of this product.

SAFETY PRECAUTIONS: This product is designed for professional installation. Caution should be exercised to prevent mishap due to improper handling. Any installation equipment employed for application should be designed for high-pressure use. The use of an appropriate MESA/NIOSH approved respirator during application is important. We also recommend the use of fabric coveralls and neoprene or other resistant gloves. Installers should use caution when walking at height during spray processes to avoid falls caused by slipping on wet coating. Installers should read and understand all technical and informational literature on this product, including the Material Safety Data Sheet, prior to using this product.