

# A·R·C·HITECTURAL<sup>®</sup>

## ROOF COATINGS



MADE IN  THE USA

### ● **PRODUCT DATA SHEET**

# HydroSHIELD<sup>™</sup>

## Rust Inhibitor

#### **DESCRIPTION**

HydroSHIELD<sup>™</sup> Rust Inhibitor is an emulsion of high grade acrylics and resins in water. It contains no co-solvents and dries by evaporation. HydroSHIELD<sup>™</sup> Rust Inhibitor incorporates state-of-the-art chemistry to prime metal surfaces, stopping rust dead in its tracks. The combination of ingredients in HydroSHIELD<sup>™</sup> Rust Inhibitor employ three mechanisms to neutralize rust and prevent its recurrence. First, HydroSHIELD<sup>™</sup> Rust Inhibitor interrupts the electro-chemical oxidation process at the positive pole or anode, preventing oxidation. Second, HydroSHIELD<sup>™</sup> Rust Inhibitor acts as an alkaline buffer, counteracting certain acids which can accelerate formation of rust. Third, as an elastomer, HydroSHIELD<sup>™</sup> Rust Inhibitor forms a tough, elastic barrier between the metal and the atmosphere, isolating the surface from the oxygen required to create rust.

#### **APPLICATION**

Surface should be clean, dry and sound. Existing surface dirt, oil, tar, grease and film should be removed from surface by approved methods prior to application of HydroSHIELD<sup>™</sup> Rust Inhibitor (see specification for Metal roofing). HydroSHIELD<sup>™</sup> Rust Inhibitor can be applied by brush, roller or airless spray equipment. It should be applied evenly without buildup. Multiple coats are recommended.

#### **BENEFITS**

No organic cosolvents	Labor, time, and cost saving
Abrasion resistant	Easy clean up with soap and water
Launderable	Flexible
Non-Toxic	Stop Rust
Nano-processed	

#### **TECHNICAL DATA**

FLEXIBILITY:	Passed 180° Mandrel Bend Test with no cracking	ASTM D-3111 at -20°F
FUNGAL GROWTH:	No fungal growth on sample.	Tropical Chamber ASTM D-3273-73T
SALT SPRAY:	500 hours with no reoccurrence of rust on surface. Rated 10 - excellent for not blistering and 10 - excellent for not rusting.	ASTM B-117 Salt Fog Chamber
COVERAGE:	100 - 300 sq. ft. per gallon depending upon conditions	
COLOR:	Yellow	

**CAUTION:** *High humidity requires a longer time for water-based coatings to form a film that is rain resistant.*

- *Avoid breathing fumes and prolonged contact with skin. Do not ingest. Keep containers covered when not in use. When using, provide proper ventilation. Dispose of product and container in accordance with local disposal codes.*

**CONSULT ARC TECHNICAL DEPARTMENT  
FOR ANSWERS TO ANY QUESTIONS  
REGARDING USE OF THIS PRODUCT**

System warranty available. When sold separate from system there is no warranty given, expressed or implied, through the values or statements made here, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by our in house and independent third party labs in order to obtain approval and/or classification. Acceptance, purchase and selection of these products are the sole responsibility of the buyer, buyer's agent, or the buyer's customer. ARC assumes no responsibility for coverage, performance, or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER GUARANTY OR WARRANTY OF ANY KIND IS MADE BY ACE ROOF COATINGS, INC. OR ITS SUBSIDIARIES, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING COSMETIC APPEARANCE, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

# ARCHITECTURAL ROOF COATINGS, INC.®

## Product Data Sheet

### APPLICATION PROCEDURES

#### FOR ALL HYDROSHIELD™ and HYDRO-THERM™ ROOF COATINGS

##### TEMPERATURE

Air and Surface: 45°F Minimum/140°F Maximum

Material: 45°F Minimum/100°F Maximum

##### RELATIVE HUMIDITY

Can be applied at relative humidity up to 95%

#### DO NOT APPLY WHEN THE TEMPERATURE CAN FALL TO WITHIN 5°F OF THE DEW POINT WITHIN 6 HOURS.

This product cures by water evaporation. It is very important that this product is not used when weather conditions are below 45°F or when there is a chance that the temperature could fall below 20°F within a 24 - hour period after application. Do not apply 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, which could cause high moisture concentration on the surface overnight.

**BRUSH:** No reduction necessary. Use nylon/polyester brush. Do not over-brush as material may start to pull.

**ROLLER:** No reduction necessary. Use 1/2" to 1-1/2" nap synthetic rollers. Keep a wet edge to avoid ripping which may change appearance. If ripping is a problem, extend lap time to after materials have skinned. Avoid rapid rolling which causes bubbling.

##### AIRLESS SPRAY-VOLUME:

Output: 2.0 – 3 gal. per min.

Pressure: 3,000 – 4,000 psi

Spray Gun: Graco – Contractor rated for pressure

Fan/Tip: 12/.021 -12/.039 reversible

Extension: 12" – 36" gun extension recommended

##### SPECIAL CONDITIONS

###### Mildew:

- Must be removed by power washing and broom scrubbing with a solution of bleach or liquid detergent and water. Rinse clean and allow dry.

###### Ponding Water:

- **ARC's Warranties do not cover damage to ARC coating caused from areas that pond water.**
- Water based coatings should not be applied on roofs that collect water and results in standing water over 48 hours after a rain. The National Roofing Contractors Association considers water ponds on any roof unacceptable. (See the NRCA Roofing and Waterproofing Manual).
- Do not use without a vapor barrier on cold storage or cryogenic tank roofing applications.

**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.

**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.

**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 40:1 greater fluid to air ratio capable of delivering 2 gallons or more per minute continuous is needed, as well as an aluminum window screen. If a fluid spray hose is used, it 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 so it is unaffected by the coating and any solvents used in 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. The larger I.D. sections of hose should be used from the pump out in all circumstances with additional hose size reductions as necessary.

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 Max or equivalent. High-pressure gun swivels are available and can reduce operator fatigue. Spray tip should be a reversible self-cleaning type with an orifice size of .021 to .039 with a fan angle of 35 to 55 degrees. Always use components rated for pump pressures.

**Cleanup Instructions:** Clean up spills and spatters immediately with water. After cleaning, flush entire spray equipment with water followed by flushing propylene glycol through metal pump parts to prevent unit from rusting.

**SAFETY PRECAUTIONS:** Refer to the MSDS sheet before use. For Chemical emergencies, spills, leaks, exposure, or accidents CALL: INFOTRAC DAY/NIGHT 1-800-535-5053

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System warranties available. When sold separately from system there is no warranty given, expressed or implied, through the values or statements made here, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by our in-house and independent third-party labs in order to obtain approval and/ or classification. Acceptance, purchase, and selection of these products are the sole responsibility of the buyer or buyer's representative. ARC assumes no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ARCHITECTURAL ROOF COATINGS, INC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY, COSMETIC APPEARANCE, AND FITNESS FOR A PARTICULAR PURPOSE.