

PRODUCT DATA

9 09 97 23 Coatings for Concrete and Masonry

# THOROCOAT® A+

Algae-resistant, water-based, smooth, high-build, 100% acrylic waterproof coating

### Description

ThoroCoat® A+ is an algae-resistant, high-build, water-based, 100% acrylic waterproof coating that protects structures against algae growth, wind-driven rain, and UV deterioration.

### Yield

See page 3 for chart.

Actual coverage may vary depending on substrate texture and porosity. Rough textured surfaces may require additional coats to achieve the minimum film build. The objective is to obtain a pinhole free, consistent film build on all treated surfaces. Applying a test area to determine actual coverage is recommended. Apply in an unstretched, uniform manner.

### Packaging

5 gallon (18.9 L) pails

### Features

- Algae resistant
- Excellent adhesion
- Resists wind-driven rain
- Excellent color retention
- Breathable
- Highly UV resistant
- Excellent hiding power
- Recoatable
- VOC compliant

### Benefits

- Resists algae growth on the coating: suitable for humid conditions
- Bonds securely to substrate for long-term durability
- Helps prevent water penetration into the substrate
- Resists color fading
- Allows water vapor to escape from the structure; prevents peeling and blistering
- Looks like new long-term
- Covers variations in substrate appearance
- Easy and cost-efficient to maintain
- Environmentally friendly

### Color

ThoroCoat® A+ is available in 4 bases (pastel, medium, ultra, and neutral), and 48 standard colors through the Elements color program. Color formulations are available through the electronic Thoro® Tint Manual. Custom colors are available upon request. For further information, please consult your local Thoro® distributor or representative.

### Texture

Smooth

### Shelf Life

18 months when properly stored.

### Storage

Store in unopened containers protected from freezing in a clean, dry area.

### Where to Use

#### APPLICATION

- For protecting and decorating

#### LOCATION

- Vertical and overhead surfaces
- Exterior
- Above grade

#### SUBSTRATE

- Concrete and masonry
- Cement plaster and stucco



## Technical Data

### Composition

ThoroCoat® A+ contains water, acrylic emulsion, fillers, and other proprietary ingredients.

### Test Data

PROPERTY	RESULTS	TEST METHODS
<b>Density</b> , lbs/gal (kg/L)	11.4 – 12.4 (1.37 – 1.49)	ASTM D 1475
<b>Solids</b> , %		ASTM D 5201
By weight	56.2	
By volume	38	
<b>Viscosity</b> , KU	102 – 110	ASTM D 562 (Stormer)
<b>VOC content</b> , lbs/gal (g/L)	0.84 – 0.90 (100 – 107)	ASTM D 3960
<b>Algae resistance</b> , specification for algae-resistant paint for decorative purposes	Passed	Singapore test SS 345:1990
<b>Resistance to wind-driven rain</b>	Meets requirement – no water penetration	TT-C-555B
<b>Accelerated weathering and UV resistance</b> ; Xenon Arc, Type B; 5,000 hrs	Passes	ASTM G 26
<b>Freeze-thaw resistance</b> , 50 cycles	Passed	DOT Method A and B
<b>Water-vapor permeance</b> , perms	13	ASTM D 1653
<b>Moisture resistance</b>	Meets requirement: no blistering, loss of adhesion, or discoloration	TT-C-555B
<b>Salt spray (fog) resistance</b> , 300 hrs	Passed	ASTM B 117
<b>Flexibility</b> , 1/2" mandrel	No cracking	ASTM D 1737
<b>Impact resistance</b> , at 22 in-lbs	Passed	ASTM D 2794
<b>Fungus resistance</b>	No growth Meets requirement	ASTM D 3273
<b>Mildew resistance</b> Aspergillus oryzae, 7 days Aspergillus niger, 21 days	No growth No growth	Fed Spec. TT-P-29 (Fed. Std. 141, Method 6152 and 6271.1)
<b>Surface burning characteristics</b>		ASTM E 84
Flame Spread	1	
Smoke	4	
Fuel contribution	7	
<b>Flash point</b> , ° F (° C)	> 200 (93)	ASTM D 56 Tag Closed Tester

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

### Yield

TEXTURE	RATE, FT <sup>2</sup> /GAL/COAT (M <sup>2</sup> /L)	WET FILM, MILS (MICRONS)	DRY FILM, MILS (MICRONS)
<b>Smooth</b>	75 – 100 (1.84 – 2.46)	21 – 16 (533 – 406)	8.3 – 6.3 (203 – 152)

## How to Apply

### Surface Preparation

1. Surface should be clean and sound. Concrete substrates should have a minimum 28 day cure and be free of all bond-inhibiting contaminants.
2. High-pressure water blast (or abrasive blast on hard, dense surfaces) surface to medium grit sandpaper texture (reference ICRI guide 03732 SP 3).
3. Repair any holes, spalled and damaged concrete with appropriate BASF Construction Chemicals repair materials. Remove any protruding concrete accessories and smooth out any irregularities.
4. Some stains may require chemical removal. Be sure to neutralize the compounds and rinse with clean water.
5. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
6. Check adhesion of old paint using ASTM D 3359, measuring adhesion by Tape Method A.
7. Treat cracks greater than 1/32" with Knife Grade or Brush Grade patching compound. Treat cracks larger than 1/4" as expansion joints and fill with appropriate BASF Construction Chemicals sealant.

### CRACKS

1. Locate and identify all cracks.
2. Clean and detail static hairline cracks caused by plastic or drying shrinkage and fill by a brush coat of Thorocoat® Smooth and allowed to dry.
3. Clean static cracks greater than 1/32" (0.8 mm) in width and fill with Thorolastic® Knife Grade or Brush Grade elastomeric patching material (see Form No. 1019113).
4. Treat cracks greater than 1/4 by 1/4" (6 by 6 mm) as standard sealant joints according to a reputable sealant manufacturer's instructions. Contact BASF Technical Service for recommendations.

### Mixing Instructions

1. Mix Thorocoat® A+ at slow speed with a drill and mixing paddle to ensure uniform color and aggregate disbursement and to minimize air entrapment.
2. In multi-pail applications, mix the contents of each new pail into the partially used pail to ensure color consistency and smooth transitions from pail to pail.

### Application

1. Thorocoat® A+ is meant to be applied as a 2 coat system achieving total dry-film thickness (DFT) of 12 – 16 mils.
2. Apply Thorocoat® A+ by brush, spray, roller, or spray-and-backroll.
3. Thorocoat® A+ is designed as a high-build acrylic coating.
4. Proper uniform wet-film thickness (WFT) must be maintained during application to ensure the performance characteristics desired (see yield rates section).
5. Always work to a natural break and maintain a wet edge during application.
6. For uniformity of color and texture, application techniques must be consistent throughout the project. Inconsistent application techniques will produce texture or color variations.

### ROLLER

1. Use a quality 1/2 – 1-1/4" nap roller cover (lamb's wool preferred).
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Roll the coating in a consistent fanlike pattern to achieve uniform mil thickness.
4. Cross roll to achieve uniform thickness and maintain a wet edge. Backroll in one direction as stroke variations may result in uneven color and texture.

### BRUSH

1. Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups.
2. Use a nylon brush only.

### SPRAY

Large airless equipment is required. Contact Technical Service for recommendations. Backrolling after spray application is recommended.

### Clean Up

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

### Drying Time

Times assume 70° F (21° C) and 50% relative humidity.

To touch: 1 – 2 hours

To recoat: 2 – 4 hours

To full cure: 5 days

Lower surface or air temperatures and higher relative humidity will extend the drying time.

## For Best Performance

- Protect all plants and vegetation from damage by overspray from Thorocoat® A+.
- Do not apply when the temperature (substrate or ambient) is 40° F (4° C) or below or is expected to fall below 40° F (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Not for immersion service.
- Do not apply Thorocoat® A+ to horizontal traffic-bearing surfaces.
- Do not apply over moving cracks, control joints, or expansion joints.
- Do not use as a crack-bridging coating.
- Do not use solvents or thinners to reduce the material.
- Do not apply to existing coatings that are not compatible. Perform appropriate adhesion tests.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.
- If partially frozen, place containers in heated area and allow to gradually warm. Do not apply heat directly to containers.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

## Health and Safety

THOROCOAT® A+

### Caution

Thorocoat® A+ contains ethylene glycol, ester alcohol, crystalline quartz silica and zinc oxide.

### Risks

May cause eye, skin or respiratory irritation. Ingestion may cause irritation. Repeated ingestion may cause kidney damage.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. DO NOT take internally. Wash thoroughly after handling. Use impervious gloves, eye protection and if the TLV is exceeded or if used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with federal, state and local requirements. Keep container closed when not in use. All label warnings must be observed until container is commercially cleaned or reconditioned.

### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

### Proposition 65

This product contains materials listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

### VOC Content

0.84 lbs/gal or <99 g/L, less water and exempt solvents.

**For medical emergencies only,  
call ChemTrec (1-800-424-9300).**

## BASF Corporation Building Systems

889 Valley Park Drive  
Shakopee, MN, 55379

www.BuildingSystems.BASF.com

Customer Service 800-433-9517

Technical Service 800-243-6739

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