



The Chemical Company

#### PRODUCT DATA

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**Cementitious  
Waterproofing**

## THOROSEAL® FOUNDATION COATING

**Waterproof cement-based coating for exterior below-grade concrete and masonry**

### Description

Thoroseal® Foundation Coating is a waterproof Portland-cement-based coating for below-grade exterior concrete and masonry surfaces. Polymer-modified with Acryl 60®, Thoroseal® Foundation Coating creates a cost-effective durable waterproofing barrier.

### Yield

225 ft<sup>2</sup>/50 lb bag (20.9 m<sup>2</sup>/22.7 kg bag) as a base coat at 1/16" (1.6 mm) dry-film thickness.

450 ft<sup>2</sup>/50 lb bag (41.8 m<sup>2</sup>/22.7 kg bag) as a topcoat at 1/32" (0.8 mm) dry-film thickness.

Coverage will vary depending on surface texture and porosity.

### Packaging

50 lb (22.7 kg) bags

### Color

Gray

### Shelf Life

1 year when properly stored

### Features

- Waterproof
- Resistant to both positive and negative hydrostatic pressure
- Breathable
- Cement-based

### Benefits

- Protects building interiors from dampness and moisture damage
- Will not "blow off" exposed side of wall
- Allows interior moisture to escape without damaging coating
- Bonds well with concrete and masonry substrates

### Storage

Transport and store Thoroseal® Foundation Coating in unopened containers and keep in a clean, dry condition protected from rain, dew, and humidity. Do not stack bags more than 2 pallets high. Store Acryl 60® in similar conditions. Do not allow Acryl 60® to freeze.

### Where to Use

#### APPLICATION

- Exterior below grade
- Foundations
- Exterior above-grade as a waterproof base coat for high-build acrylic coatings

#### LOCATION

- Exterior
- Below and above grade

#### SUBSTRATE

- Concrete
- Masonry

### How to Apply

#### Surface Preparation

1. Patch all holes and cracks before installation.
2. Relieve hydrostatic pressure in concrete block with weep holes.
3. Roughen or brush blast extremely smooth surfaces such as precast and cast-in-place concrete to ensure good adhesion of Thoroseal® Foundation Coating.
4. Pre-dampen substrate to surface saturated-dry (SSD) condition.



Technical Data

Composition

Thoroseal® Foundation Coating contains cement, graded sand, and proprietary additives.

Test Data

PROPERTY	RESULTS	TEST METHODS
<b>Water absorption, %</b>		ASTM C 67
Boiling water submersion at 5 hours	3.9	
Water loss after 5 hours	0.42	
<b>Impact strength, lbs</b>	24 = Passed	Fed. Spec. TT-P-0035
<b>Hardness, at 21 days,</b> requirement min = 30, max = 60	47	Fed. Spec. TT-P-0035
<b>Water-vapor transmission, perms</b>	12	ASTM E 96

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

Mixing

1. Mix Thoroseal® Foundation Coating with a mixing liquid consisting of a blend of Acryl 60® diluted with water. Maximum dilution ratio is 1 part Acryl 60® to 3 parts water. Approximately 6 quarts (5.7 L) of mixing liquid is needed per 50 lbs (22.7 kg) of Thoroseal® powder. Water demand may vary with ambient temperatures and humidity levels.
2. For best results, mix Thoroseal® Foundation Coating with a slow-speed drill and mixing paddle. Gradually add the powder to the mixing liquid while drill is running.
3. When properly blended, Thoroseal® Foundation Coating will have the lump-free consistency of smooth, heavy batter.
4. Allow the mixed Thoroseal® Foundation Coating/Acryl 60® to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder. Then remix the wet mixture and apply. A small amount of mixing liquid can be added to this remixing.

Application

1. Apply Thoroseal® Foundation Coating with a Thoro® brush or broom or equivalent stiff-fiber brush or by textured spray equipment. Spray applications require back-brushing or brooming to properly fill voids and achieve uniformity.
2. Completely dampen the substrate with water before application starts. A damp surface will prevent surface drag on the material, keep the substrate cold and eliminate flash setting.
3. It is essential to work the first coat thoroughly into the substrate to completely fill and cover all voids, holes, and nonmoving cracks. Finish with a horizontal stroke for an even coat.
4. Allow to cure 24 hours, then apply the second coat and finish with a vertical stroke. Above grade, the second coat can be replaced with a Thoro® high-build architectural coating to achieve better color uniformity.

Specific Applications

FOR ORDINARY WATER PRESSURE OR DAMPNESS IN BLOCK OR CONCRETE FOUNDATIONS

1. Apply 2 evenly distributed applications of Thoroseal® Foundation Coating, each a minimum of 2 lbs/yd² (1 kg/m²), or a total of 4 lbs/yd² (2 kg/m²).
2. Make sure both applications carry down to and over footer, forming a 1-1/2" (38 cm) cove at junction of walls and footer.

FOR SEVERE WATER PRESSURE AND PARGE COAT

1. Brush on coating using 2 lbs/yd² (1 kg/m²).
2. After 12 hours, apply trowel coat a minimum of 12 lbs/yd² ( 5.4 kg/m²) or sufficient material to bring surface to true and level lines.
3. For trowel applications add 30 lbs (13.6 kg ) clean silica sand to each 60 lbs (27.2 kg) of Thoroseal® Foundation Coating.

FOR EXTERIOR ABOVE GRADE AS A BASE COAT

1. On above-grade exterior applications, apply Thoroseal® Foundation Coating at a minimum of 2 lbs/yd² (1 kg/m²), back brushing the material vertically
2. Allow to cure a minimum of 24 hours, then top coat with either Thorosheen® or Thorocoat®.



**Clean wall.**



**Clean footer.**



**Dampen Surface.**



**Mix to batter consistency.**



**Brush it on.**



**Level it out.**



**Apply second coat.**



**Sealed and waterproofed.**

### For Best Performance

- Thoroseal® Foundation Coating must be modified with Acryl 60® to achieve the properties listed in the product data sheet.
- For an NSF product, see Thoroseal® (Form No. 1019906)
- Do not apply to substrates with active water leaks or moving cracks; patch all leaking static cracks and holes with Waterplug®. Repair any other nonmoving cracks or voids with the appropriate Thoro® repair product, and repair all moving cracks or voids with appropriate sealant.
- Maintain or place expansion and control joints as necessary.
- Do not apply in rain or when rain is expected within 24 hours. Do not apply above 90° F (32° C) or below 40° F (4° C) or when temperatures are expected to fall below 40° F (4° C) within 24 hours. For hot and cold temperature applications, store Thoroseal® Foundation Coating, Acryl 60®, and water at 50 to 70° F (10 to 21° C) before use.
- Windy, dry, or hot conditions may require rewetting of Thoroseal® Foundation Coating during cure and the use of polyethylene barriers.
- Before specifying Thoroseal® Foundation Coating for water-retaining structures, conduct tests to determine water quality. Thoroseal® Foundation Coating is not intended for continuous contact with acid or sulfate-containing water. Very soft water will have an adverse effect on Thoroseal® Foundation Coating.
- Service temperatures: immersion, up to 140° F (60° C); cleaning water, up to 200° F (93° C); dry air, up to 220° F (104° C) .
- Allow Thoroseal® Foundation Coating to cure 7 – 10 days before immersion in water.
- On all projects, it is recommended that a sample be prepared on site and approved prior to the commencement of the work. The site sample should confirm the color, texture, and workmanship required until the job is finished and accepted. Retain the sample until final approval is secured.
- Not intended as a decorative finish coat.
- 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

### THOROSEAL® FOUNDATION COATING

Thoroseal® Foundation Coating contains Portland cement, crystalline quartz silica, calcium hydroxide, anhydrite, magnesium oxide, limestone and gypsum.

#### Risk

Product is alkaline on contact with water and may cause injury to skin or eyes. Ingestion or inhalation of dust may cause irritation. Contains small amount of free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

#### Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

## First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. 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 material listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

## VOC Content

0 lbs/gal or 0 g/L, less water and exempt solvents.

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

## BASF Construction Chemicals, LLC – 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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