



The Chemical Company

PRODUCT DATA

9 09 91 00 Paints

THOROSHEEN®

Water-based 100% acrylic paint

Description

Thorosheen® is a water-based, 100% acrylic paint for concrete and masonry. It provides long-term protection against wind-driven rain, fungus, and mildew growth.

Yield

100 – 200 ft²/gal (2.5 – 4.9 m²/L) per coat, depending on surface roughness and porosity.

Packaging

5 gallon (18.9 L) pails

Color

Thorosheen® 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

1 year when properly stored

Features

- Highly breathable film
- 100% acrylic
- Stain and dirt resistant
- Resistant to wind-driven rain, fungus and mildew growth
- Excellent color retention and UV resistance
- VOC compliant

Benefits

- Does not trap moisture vapor; prevents peeling and blistering
- Forms a tough, durable, smooth film; provides long-term adhesion
- Offers low maintenance
- Offers long-lasting durability
- Enhances aesthetic appearance long-term
- Environmentally friendly

Storage

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

Where to Use

APPLICATION

- For protection and decorating

LOCATION

- Vertical and overhead
- Interior or exterior

SUBSTRATE

- Concrete
- Stucco, Portland cement plaster
- Brick and concrete masonry units (CMU)
- Previously coated structures
- EIFS

How to Apply

Surface Preparation

1. All new substrates must be fully cured 28 days.
2. Remove all form tie wires and patch holes, small voids, and spalls using the appropriate repair product.
3. Remove all dust, dirt, form oils, form-release agent residues, curing compounds, efflorescence, biological residues, chemical contaminants, laitance, or any other loose, poorly bonded existing acrylic paint films. A combination of cleaning methods may be required.
4. Pressure waterblasting (with or without abrasives in the water stream) is recommended. A properly prepared concrete surface will have the appearance and texture of 100 grit sandpaper. Allow substrates to dry after water cleaning. Slightly damp substrates are acceptable.
5. Some stains and surface contaminants may require chemical removal. After using chemical cleaners, be sure to neutralize the compounds and fully rinse the surface with clean water. Verify adhesion by a test area if in question.



Technical Data

Composition

Thorosheen® contains water, acrylic emulsion, fillers, and other proprietary ingredients.

Test Data

PROPERTY	RESULTS	TEST METHODS
Density , lbs/gallon (kg/L)	11.8 (1.41)	ASTM D 1475
Solids by weight , %	56.5	ASTM D 5201
Solids by volume , %	38	ASTM D 5201
Viscosity , KU	105 – 110	ASTM D 562 (Stormer)
VOC content , lbs/gal (g/L)	0.67 (81)	ASTM D 3960
Resistance to wind-driven rain	Meets requirement – no water penetration when applied in 2 coats or in 1 coat over Thoro® Block Filler	TT-C-555B
Artificial weathering and UV resistance , Xenon Arc, 5,000 hours	Passed	ASTM G 26
Water-vapor permeance , perms	19	ASTM E 96
Flexibility , 1/4" mandrel	Passed	ASTM D 1737
Mildew resistance	Meets requirement – no growth at 21 days at 28° C (Aspergillus niger)	TT-P-29G, Federal Standard 141 B, Method 6271
Flash point , (° F ° C)	> 200 (> 93)	Lab Method

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

6. Thorosheen® is not a crack filling or crack bridging coating. For substrates with cracks, refer to the Thorolastic® product data sheet.

7. Chalky substrates should be primed with Thoro® Primer 2K.

Mixing

1. Mix Thorosheen® with a slow-speed mixer to ensure color uniformity 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. Apply by brush, roller, or spray. Use airless sprayers.

2. Always work from a wet edge with a 50% overlap.

3. Pretape all fixtures, glass, or other items not intended for coating. Protect all foliage from overspray.

4. Always work to a natural break before stopping.

5. Before applying, dampen brushes or rollers with water. Use equipment designed for water-based coatings.

6. Apply at 8 – 16 mils (203 – 406 microns) wet-film thickness (WFT) per coat.

Drying Time

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

To touch: 1 – 2 hours

To recoat or topcoat: 2 – 4 hours

To full cure: 5 days

Lower surface or air temperatures and higher relative humidity can extend dry time.

Topcoating

Cured Thorosheen® films can be topcoated with Thoroglaze®, water-based semi-gloss clear acrylic sealer (see Form No. 1019107) for added protection from staining or abrasion.

Clean up

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

For Best Performance

- Do not apply when temperature (substrate or ambient) is 40° F (4° C) or below or expected to fall below 40° F (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours.
- Do not apply to horizontal traffic-bearing surfaces.
- If partially frozen, place in a heated area and allow to gradually warm up. Do not apply heat directly to containers.
- 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 B. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.
- 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

THOROSHEEN®

Warning

Thorosheen® contains ethylene glycol, silica, crystalline quartz and zinc oxide.

Risks

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

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. 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

0.67 lbs/gal or 81 g/L, less water and exempt solvents

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

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