

## PRODUCT DATA

7<sup>07 19 16</sup> Water  
Repellents

## HYDROZO<sup>®</sup> SILANE 40 VOC

Clear, solvent-based, VOC-compliant,  
silane penetrating sealer

### Description

Hydrozo<sup>®</sup> Silane 40 VOC is a clear, breathable, solvent-based, VOC-compliant, greater than 40% alkylalkoxysilane penetrating sealer. It penetrates deeply and chemically reacts with concrete to form a long-lasting water-repellent surface.

### Yield

Poured in place and precast concrete:  
125 – 225 ft<sup>2</sup>/gallon (3.1 – 5.5 m<sup>2</sup>/L)

Coverage may vary greatly with porosity of the substrate; extremely porous substrates may require 2 coats. Perform test panels to ensure desired results and coverage rates.

### Packaging

5 gallon (18.9 L) pails  
53 gallon (201 L) drums

### Color

Clear

### Shelf Life

18 months when properly stored.

### Storage

Store in unopened containers in a clean, dry area between 35 and 110° F (2 and 43° C).

### Features

- Greater than 40% silane
- Water repellent
- Solvent based
- Breathable
- Transparent, nonstaining
- Surface sealing
- VOC compliant

### Benefits

- Penetrates deeply into the substrate
- Helps to protect from damage caused by chloride intrusion, extends life of structures
- Excellent for cold-weather applications
- Allows interior moisture to escape without damaging sealer
- Does not alter the natural surface appearance
- Helps reduce efflorescence, atmospheric staining, and mildew
- Environmentally friendly

### Where to Use

#### APPLICATION

- Parking decks
- Bridges
- Stadiums

#### LOCATION

- Horizontal
- Exterior
- Above grade

#### SUBSTRATE

- Concrete: precast, prestressed, and poured in place

### How to Apply

#### Surface Preparation

1. Verify substrate has properly cured. Concrete should obtain 80% of design strength, typically achieved within 14 – 28 days.
2. Clean all surfaces of all sand, surface dust and dirt, oil, grease, chemical films and coatings, and other contaminants prior to application. Use waterblast, sandblast, or shotblast as necessary to achieve the desired surface condition.
3. Air, material, and surface temperatures should be 40° F (4° C) or higher during application. Do not apply sealer when temperatures are expected to fall below 20° F (-7° C) within 12 hours or when rain is expected within 4 hours following the application.
4. Hydrozo<sup>®</sup> Silane 40 VOC may be applied to slightly damp surfaces.
5. Caulking and sealant work may be done before or after the application of the sealer. Allow sealant to cure fully cured before application of Hydrozo<sup>®</sup> Silane 40 VOC.

## Technical Data

### Composition

Hydrozo® Silane 40 VOC is an alcohol-based alkylalkoxysilane product.

### Typical Properties

PROPERTY	VALUE
<b>Active alkylalkoxysilane content, % by weight</b>	> 40
<b>Penetration, in (mm), average depth, depending upon substrate</b>	0.20 (5)
<b>Surface appearance after application</b>	Unchanged

### Test Data

PROPERTY	RESULTS	TEST METHODS
<b>Flash point, ° F (° C)</b>	53 (12)	SETA, IPA
<b>Waterproofing after abrasion, %</b> , at 225 ft <sup>2</sup> /gal (5.6 m <sup>2</sup> /L)	88.4	Alberta Transportation and Utilities Type 1B
<b>Resistance to chloride, lb/yd<sup>3</sup></b> Criteria of 1.5 at 1/2" Criteria of 0.75 at 1"	< 0.2 < 0.00	
<b>Water weight gain, % reduction</b> , at 200 ft <sup>2</sup> /gal (5 m <sup>2</sup> /L)	86 – exceeds criteria	NCHRP 244 Series II-cube test
<b>Absorbed chloride, % reduction</b> , at 200 ft <sup>2</sup> /gal (5 m <sup>2</sup> /L)	92 – exceeds criteria	NCHRP 244 Series II-cube test
<b>Absorbed chloride, % reduction</b> , at 200 ft <sup>2</sup> /gal (5 m <sup>2</sup> /L)	99 – exceeds criteria	NCHRP 244 Series IV - Southern climate
<b>Moisture-vapor transmission rate, %</b>	102	OHD-L-35

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

### Application

1. Test a small area of the surface (generally a 5 by 5 ft [1.5 by 1.5 m] section) before starting general application of any clear penetrating sealer to ensure desired results and coverage rates. Allow 5 – 7 days for the product to fully react before evaluating. Refer to Appendix HY-3: Test Area Application.
2. Stir material thoroughly before and during application.
3. Apply to saturation using low-pressure non-atomizing spray or pouring, followed by a squeegee or a broom for even distribution.

### Drying Time

Typical drying time for Hydrozo® Silane 40 VOC is 4 hours at 70° F (21° C) and 50% relative humidity. Cooler temperatures or higher relative humidity can extend the drying time.

### Clean Up

Clean equipment with mineral spirits or xylene.

### For Best Performance

- Do not apply during inclement weather or when inclement weather is anticipated within 12 hours.
- Protect asphalt-based products, such as roofing materials, plastic products, shrubbery, and plant life from overspray.
- Take caution with specially coated glass. Test small areas before application to ensure the product does not discolor the coating.
- To prevent damage to nearby shrubbery and landscaping, cover or protect with drop cloth.
- Paint line striping after the application of the sealer.
- Plastic windows will turn opaque when sprayed with this product.
- Variations in the texture and porosity of the substrate will affect the coverage and performance of the product.
- Hydrozo® Silane 40 VOC will not inhibit water penetration through unsound or cracked surfaces, or surfaces with defective flashing, caulking, or structural waterproofing.
- 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 versions.
- 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

HYDROZO® SILANE 40 VOC

#### Warning

Hydrozo® Silane 40 VOC contains isopropyl alcohol and akloxysilane.

#### Risks

Flammable liquid and vapor. May cause skin and eye irritation. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. Ingestion may cause irritation of the mouth, throat and stomach with nausea and abdominal pain. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

### Precautions

KEEP OUT OF THE REACH OF CHILDREN. KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid breathing vapors. Keep container closed. Use only with adequate ventilation. DO NOT take internally. 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. DO NOT cut or weld on or near empty container. Empty container may contain explosive vapors or hazardous residues. 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 IMMEDIATE MEDICAL ATTENTION. 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, SEEK IMMEDIATE MEDICAL ATTENTION. If swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Should vomiting occur, keep victim's head below hips to avoid aspiration of vomitus into victim's lungs.

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

#### Proposition 65

This product does not knowingly contain chemicals listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

#### VOC Content

Less than 5.01 lbs/gal or 600 g/L, less water and exempt solvents.

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

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