# S-TECH 40SK<sup>™</sup>

## CONSOLIDATOR AND WATER REPELLENT SUPERIOR PROTECTION OF VERY POROUS BRICK, CONCRETE, NATURAL STONE AND TERRACOTTA AGAINST FREEZE-THAW / SALT SPALLING.

S-TECH 40SK<sup>™</sup> is an impregnating, invisible fully breathable consolidator and silane water repellent. S-TECH 40SK<sup>™</sup> is designed to protect softer, more porous building materials in a freeze-thaw or salt water environment and helps to consolidate friable surfaces.

Denser, stronger materials may only require a water repellent, but S-TECH 40SK is recommended for very porous types of natural stone, brick, terracotta, paving and grout which are more prone to spalling damage caused by water freezing and dissolved salts. Treated surfaces become easier to clean, maintain and keep looking good for longer.



# TYPICAL APPLICATIONS

- Protection of very porous building materials used in the building envelope and horizontal surfaces, including: Cladding, blockwork, brickwork, grout and salt water pool surrounds, paving and patios.
- S-TECH 40SK<sup>™</sup> is suitable for new build and restored masonry surfaces.
- Recommended for use on very porous building materials which are exposed to salt water or freezethaw conditions.

# SUITABLE SURFACES:

Suitable for very porous building materials, including sandstone, limestone, low MPA precast concrete, cast stone, more porous brick, Saltillo, terracotta and grout.

# **BENEFITS**:

- S-TECH 40SK<sup>™</sup> is a specialized impregnator, designed for premium protection of very porous building materials against spalling in a freeze-thaw and / salt water environment.
- Penetrates deeply and forms full covalent bonds inside the capillaries for maximum, long lasting performance.
- Superior protection against other problems caused by water and water borne salts, including: efflorescence, picture framing and damp migration
- Widely used for sealing sandstone, limestone, travertine, dry-stamped concrete pavers, cast stone and low MPA precast concrete around salt water swimming pools or on vertical surfaces exposed to freeze-thaw conditions.
- Retains natural surface color and finish
- Keeps surfaces looking new for longer, makes cleaning easier
- Fully breathable, allowing water vapor to escape freely, avoiding harmful moisture build-up inside the material
- Designed for outdoor surfaces on residential and commercial projects.

- Negligible change to slip resistance when applied according our written instructions and guidelines.
- A 15 year performance warranty is available see Warranty section below for details.
- High resistance to alkaline (high pH) environments. Concrete is highly alkaline / base and can severely shorten the life of other technologies.
- Able to seal hairline cracks up to 0.3 mm (0.012 in.)
- Non film forming so it cannot flake or peel and is resistant to UV
- Dry-Treat only uses silanes which produce alcohol. Dry-Treat sealer do NOT contain methoxy silanes which emit methanol and can cause blindness / death

# WARRANTY:

A 15 year performance warranty is available if product is applied by a level 3 or 4 Accredited Applicator according to our written instructions and guidelines, at the minimum total application rate for the surface material (see table in the Total Application Rates section above).



Surface materials which are in regular contact with salt water, including the splash zone around salt water pools, must be dip sealed prior to installation to apply for a performance warranty. The material must be fully submerged for a minimum of 15 seconds.

Industry professionals can contact their local Dry-Treat representative or email info@drytreat.com to enquire about Accredited Applicator training and certification.



## HOW TO USE:

- 1. ALWAYS TEST PRODUCT ON A SMALL AREA FIRST and allow a 24 hour cure time to determine the ease of application and desired results.
- 2. Wear suitable solvent-resistant gloves, protective clothing, safety goggles and an organic vapor respirator during application
- 3. Ensure surfaces to be treated are dry, clean and free of residues
- 4. Surface temperature should be 40 95° Fahrenheit / 5 35° Celsius
- 5. Product is not to be diluted / thinned
- 6. When applying to a building façade or within reach of other surfaces, mask or otherwise protect these other surfaces such as window frames from overspray. If they receive overspray, clean immediately with clean, dry white cotton or other suitable absorbent cloths. Alcohol, methylated spirits or acetone can be used, but take care not to damage paintwork or other coatings.
- 7. Apply the product using a low pressure sprayer with a fan spray nozzle, working from the lowest sections upwards.
- 8. On horizontal surfaces, apply 2 generous coats, at least 10 minutes apart. For the best results, wait longer between coats, but apply each coat before the previous coat has dried.
- 9. On vertical surfaces, to minimize dripping and running it is best to apply 4 lighter coats rather than 2 heavy coats and to begin at the bottom of a surfaces and work upwards.
- 10. The material must be allowed to cure for at least 2 weeks before it comes into contact with salt water.
- Total application rate varies widely depending on the material, porosity and finish: 160 – 600 sq. ft. per gallon (4 – 15 sq. m. per liter). See table under Total Application Rates below.
- 12. Thoroughly polish off any excess product residue on the surface with clean, white absorbent cloths before the final coat dries. Tip: to minimize the amount of excess do some tests to determine the right amount of product to spray for each coat.
- 13. Clean equipment with methylated spirits, alcohol or acetone
- 14. IMPORTANT DIP SEALING: Surface materials which are in regular contact with salt water, including the splash zone around salt water pools, must be dip sealed prior to installation to apply for a performance warranty. The material must be fully submerged for a minimum of 15 seconds.

Warning: Sealer will not prevent acid etching or physical wear of the surface and may cause some darkening

#### PACK SIZE

- USA and Asia Pacific 5 gallon / 18.9 liter; 54 gallon / 204.5 liters; 250 gallon / 946 liter special order
- Europe 5 Gallon (18.9Litre); 54 and 250 gallon special order.

#### **YIELD**

120 - 280 sq. ft. per gallon (3 – 7 sq. m. per liter).

### SHELF LIFE & STORAGE:

- Best within 24 months of purchase.
- Keep container tightly sealed, in a well-ventilated place, at 36 85° Fahrenheit or 2 30° Celsius

## **TECHNICAL DATA**

- Active Content: ~40% modified silane and consolidator.
- Specific Gravity: 0.834
- Color: Clear colorless liquid
- Weight: 6.97 lbs / gallon; 0.834 kg / liter
- VOCs:
  - <400 g/L (excluding water) for EPA purposes.
  - <120 g/L (including water) for U.S. state purposes (Low Solids Coating)

### **COUNTRY OF MANUFACTURE**

USA

#### **TEST RESULTS**

Consolidation Test - AS/NZS4456.10 – resistance of masonry to salt attack:

- Limestone >99% reduction of weight loss from salt water corrosion
- Sandstone >99.9% reduction of weight loss from salt water corrosion

### **TYPICAL PENETRATION**

5 - 20mm depending on application rate and surface porosity.

### **ADVANCED APPLICATION GUIDELINES:**

- Limitations:
  - S-TECH 40SK<sup>™</sup> should never be diluted
  - S-TECH 40SK<sup>™</sup> should only be used on exposed surfaces which are not subjected to constant static water pressure.
  - Not intended for below-grade waterproofing or for use as a waterproof membrane.



- **Do not dilute or apply to a wet surface:** Silanes are reactive. This means they react chemically to form covalent bonds within the treated material. If the silane is made to react before it finds suitable bonding sites, then it cannot bond inside the pores and performance and lifespan can be affected.
- **Testing and cure time:** It can take up to 4 weeks for all of the silane molecules to migrate and find suitable sites to bond inside the pores. As more silane bonds inside the treated material, performance improves. It is recommended to let treated surfaces cure in a well ventilated area for at least 3 weeks before testing for penetration or water repellence.
- Applying the right amount of product consistently on a large area:
  - Only tackle one small area at a time so that you can apply additional coats before any residue from the previous coat dries.
  - It is recommended to measure out an area before starting application and a suitable amount of product to get a visual gauge and feel for how much product to spray for each coat.
  - At regular intervals measure the area you have sealed and the amount of product used to check that you are consistently applying the desired amount of product.
  - When applying additional coats, apply each coat perpendicular to the previous coat, to ensure all areas of the surfaces receive a consistent amount of product.
- Dense surfaces (especially with a polished finish): S-TECH 40Sk<sup>™</sup> is only designed for highly porous surfaces and is not recommended for dense materials.
- Excess product (product residue):
  - It is VERY IMPORTANT to thoroughly remove all product residue from a surface before it dries as the consolidator can be very difficult to remove once cured.
  - The amount of residue left on the surface, once the sealer has had sufficient time to penetrate, will vary depending on the surface type, porosity and finish. More porous surfaces with a honed (matte) or rougher finish will often absorb all the product applied, leaving no residue, while surfaces such as granite, especially if they have a highly polished finish will be less absorbent and there will be plenty of excess product to remove.
  - Excess residue must always be thoroughly removed by polishing with clean, dry, absorbent white cloths before it dries on the surface. If the product has dried, damp a cloth with a small amount of product and use this to soften the residue, then polish off with a clean dry cloth.
- Cleanup of equipment / spills: Ensure you have a good supply of alcohol, methylated spirits or acetone and clean white absorbent cloths, paper towels to clean your equipment and any overspray. If using solvent to clean overspray, take care not to damage any paint, coatings or other vulnerable surfaces.
- Applying to vertical surfaces: On vertical surfaces, to

minimize dripping and running it is best to apply 4 lighter coats rather than 2 heavy coats and to begin at the bottom of a surfaces and work upwards. Place tarp or plastic sheets below to catch the excess drips.

- Quick method for avoiding overspray:
  - Have a light rectangular piece of board handy which you can hold with one hand to protect surfaces while you spray with the other hand. This is quicker than masking off areas.
  - Note: If product overspray lands on adjacent surfaces such as window frames, it will cause these to become water repellent, so overspray should be removed with clean white absorbent cloths immediately (methylated spirits, alcohol or acetone can be used but take care not to damage any paint or coating).

### TOTAL APPLICATION RATES

- Use table below to find the correct total application rate for a particular material. If you are unsure what application rate to use, seek advice from your local Dry-Treat Representative.
- Total Application Rates include all coats. So, if for e.g. the total application rate is 200 sq. ft. per gallon (5 sq. m. per liter), and you are applying 4 coats to a vertical surface, you will apply each coat at approximately 800 sq. ft. per gallon (20 sq. m. per liter).

Surface Type	sq ft/gal.	sqm/L
Bluestone (USA Boston Bluestone)	200	5
Brick	240	6
Poured Concrete Medium	240	6
Concrete Paver (dry pressed)	160	4
Concrete Paver (wet cast)	240	6
Coral Stone	200	5
Grout Lines	1200 linear feet	90 linear meters
Limestone Honed - Dense	240	6
Limestone Honed - Porous	200	5
Limestone around salt water pool	Dip Seal	
Saltillo	200	5
Sandstone (Indian, hard)	240	6
Sandstone (soft)	160	4
Sandstone around salt water pool	Dip Seal	
Terracotta porous	200	5
Travertine honed	280	7
Travertine around salt water pool	Dip Seal	



## TRANSPORT

Proper shipping name: Flammable liquid, n.o.s. (Contains acetone). Dangerous Class: 3 UN Number: 1993 Packing Group: II

Made in USA

#### WARNING

Highly flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Ground container and receiving equipment. Use explosion-proof electrical safe equipment.

#### FIRST AID:

- If swallowed, give a glass of water and contact a physician.
- If skin contact occurs remove contaminated clothing and wash skin thoroughly. If irritation persists, contact a physician.
- If in eyes, hold open, flood with water for at least 15 minutes and contact a physician.
- If vapors are inhaled, relocate to fresh air. If symptoms persist contact a physician

#### **ACCIDENTS**

- Spillage Take up mechanically or with absorbent material such as sand, earth or vermiculite.
- Remove all ignition sources

#### PRECAUTIONS

- Do not take internally.
- Apply when surface temperature is between 5 and 35 C° (40 to 95°F).
- Avoid moisture contact with the surface for 6 hours after application.
- Protect surrounding areas from over spray .
- Keep away from drains, plants, water and soil.
- Use only in well-ventilated areas.
- Use a positive pressure respirator if ventilation is inadequate.
- Wear suitable solvent-resistant gloves, protective clothing, safety goggles and an organic vapor respirator during application.
- Avoid applying in windy conditions.
- Wash hands thoroughly.

