## TECHNICAL DATA

# ALL SHIELD EX

Modified Oleophobic Penetrating Concrete Protectant



# **DESCRIPTION**

ALL SHIELD EX is an exempt solvent, low VOC, synthetic-modified, silane-siloxane concrete protectant. This clear, penetrating, breathable protectant is designed for use on interior/exterior, horizontal/vertical concrete, natural or synthetic stone surfaces to resist oil, water, food stains, and many other liquid contaminants.

ALL SHIELD EX penetrates the surface and bonds directly with the substrate, which results in a surface that is highly resistant to moisture, staining and deicing salts.

ALL SHIELD EX helps protect concrete and stone surfaces including commercial and industrial floors, vehicle repair and service facilities, pavements, driveways, brick and concrete pavers, parking structures, bridges, marine platforms etc. against the corrosive effects of de-icing salts, moisture and weathering.

# FEATURES/BENEFITS

- Excellent oil, water and stain repellent for interior/ exterior surfaces subjected to motor oil, de-icing salts and other damaging contaminants.
- Low VOC (< 100 gm/l) formula; SCAQMD, OTC, LADCO, compliant
- Reduces water penetration minimizing the effects of freeze-thaw and weathering on concrete structures
- Long-lasting protection for new as well as old concrete and stone surfaces
- Dries quickly, tack-free and skid-resistant
- Colorless and non-yellowing
- USDA accepted for indirect food contact
- Fast drying and can be recoated

# **APPLICATION**

**EQUIPMENT**: Must use a low pressure (< 50 psi), nonatomizing sprayer with a respirator and proper ventilation. Use a microfiber applicator for polished, dense surfaces.

**COVERAGE RATE**: Average rate is determined by surface porosity:

Porous surfaces: 150-200 ft²/gal Light Broom finish: 200-400 ft²/gal Smooth/Medium trowel 400-500 ft²/gal Dense/Polished concrete 800-1200 ft²/gal

A test area is recommended to determine actual coverage rates

**NEW CONCRETE**: Surface should be dry, well cured (21 day minimum) using water, polyethylene, curing paper, SpecChem "**E-Cure**" or a dissipating resin based curing compound like "**SpecRez**".

Always test a small area to confirm appearance, compatibility, coverage and desired performance. Substrate must be free of all moisture, curing residue, dust, debris, oil and other contaminates and must be absorptive to allow penetration of the ALL SHIELD EX. All joint sealant, caulks and patching should be in place before applying.

# **APPLICATION** (con't)

**HORIZONTAL/VERTICAL SURFACES**: Generously apply using a low pressure sprayer (airless sprayer 10 to 20 psi), roller, brush or broom. Broom or squeegee out any puddles or free standing material.

Adjust application rate on very porous surfaces or apply additional coats in a wet-on wet method. Do not allow excess to dry on the surface.

**OLD CONCRETE AND MASONRY**: Remove any previously applied sealers, dust, dirt, tar, oil, etc. with pressure wash and SpecChem **Orange Peel or Berry Clean** or use other appropriate measures to properly prepare the substrate. Membranes of any kind must be removed. Substrates must be dry and absorptive to allow penetration of the ALL SHIELD EX.

## **PACKAGING**

55 gallon drums/ 5 gallon pails/1 gal cans (6 per case)

# **TECHNICAL DATA**

Type:	Modified fluoropolymer, siloxane/silane blend
Shelf Life:	2 years
Color:	Water clear
Resistance to UV	rays: Excellent

# **CLEANING/MAINTENANCE**

Spills and contaminants should be cleaned as soon as possible. Avoid cleaning with strong solvents, alcohols or oil base cleaners that will leave a residue. Use clean water or a pressure washer to remove any surface stains

For stubborn stains, use a diluted solution of SpecChem Orange Peel or Berry Clean with water in a 1 to 3 ratio, respectively. This will provide an excellent cleaner/degreaser. Thoroughly flush any residue from the surface with clean water.

If after frequent or aggressive cleanings, water readily penetrates the concrete, reapply All Shield EX



1511 Baltimore Ave, Suite 600 Kansas City, MO 64108 www.specchemllc.com 866.791.8700

# STAIN RESISTANCE CHART

Concrete sample was polished with 400 grit resin diamond pad and All Shield was applied per the technical data sheet. The samples were allowed to fully react for a week before testing. Each reagent was applied and allowed to dwell on the treated substrate for 15mins, 1hr, 4hr, and 8hrs. A visual evaluation was performed to determine each agent's effect on the substrate.

E = Excellent (No Adverse Effects)

G = Good (Limited Adverse Effects)

F = Fair (Moderate Adverse Effects)

P = Poor (Unsatisfactory)

#### **CHEMICALS ASTM D-1308M**

Acids	8 Hrs	4 Hrs	1 Hr	15 min
10% HCl	Р	Р	Р	Р
10% Phosphoric acid	Р	Р	Р	Р
10% Sulfuric acid	Р	Р	Р	Р
Salts	8 Hrs	4 Hrs	1 Hr	15 min
Calcium Chloride	Е	Е	Е	Е
Sodium Chloride	E	E	E	E
Sodium Bicarbonate	E	Е	Е	Е
Sodium Carbonate	Ε	E	Ε	Ε
Bases	8 Hrs	4 Hrs	1 Hr	15 min
10% Potassium Hydroxide	Е	Е	Е	Е
10% Sodium Hydroxide	E	Е	Ε	Ε
Solvents	8 Hrs	4 Hrs	1 Hr	15 min
Benzyl Alcohol	Е	Е	Е	Е
Ethyl Alcohol (50%)	E	E	E	Е
Isopropyl Alcohol	E	Е	Е	Е
Propylene Glycol	E	E	E	E
Acetone	Ε	Ε	Ε	Е
Mineral Spirits	Ε	Е	Е	Е
Xylene	Ε	Ε	Ε	Е
Automotive	8 Hrs	4 Hrs	1 Hr	15 min
Gasoline	Е	Е	Е	Е
Brake Fluid	E	Ε	Е	Е
Motor Oil (Used)	E	E	Е	Е
Transmission Fluid (Used)	E	Ε	Е	Ε
Foods	8 Hrs	4 Hrs	1 Hr	15 min
Cola	E	E	E	Е
Mustard	E	E	E	Е
Ketchup	E	E	Е	Е
Red Wine Vinegar	G	G	Е	Е
Balsamic Vinegar	F	F	G	Е
Vegetable Oil (Hot)	Е	E	Е	Е
Pickle Juice	F	G	G	E
Coffee (Hot)	E	E	E	E
Other	8 Hrs	4 Hrs	1 Hr	15 min
Windex	Е	Е	Е	Е
Hydrogen Peroxide (3%)	E	E	E	Е
Bleach (Clorox Regular)	E	E	E	E
Dawn Dish Soap	E	Е	Е	Е
Laundry Detergent (Tide)	E	E	E	E
Cold Distilled Water	E	E	E	Е
Hot Distilled Water	E	E	E	E

Test performed under laboratory conditions. Field results may vary depending on environmental conditions. After exposure, samples were rinsed with only water and allowed to dry 12 hours before inspection.

# LIMITATIONS/PRECAUTIONS

# DO NOT CUT OR WELD CONTAINER FLAMMABLE LIQUID KEEP AWAY FROM OPEN FLAME PROFFESIONAL/INDUSTRIAL USE ONLY

All Shield EX is not suitable for asphaltic surfaces or for below grade waterproofing. Protect glass, metal and other non-masonry surfaces from over spray.

Can be applied below freezing (32°F) provided the concrete is free of frost or any contaminants.

Substrate must be completely dry or whitening may occur. Do not use over a curing membrane.

Do not atomize/aerosolize when spraying. Must use respirators with organic vapor cartridges, gloves, goggles and proper ventilation until solvents have completely evaporated (approx. 60 mins).. Avoid any inhalation or skin contact. Do not buff, burnish or polish after application.

Initial reaction will be in 16 to 24 hours. Treated areas may be returned to service once product has penetrated and surface is dry. Substrates should be saturated with material, but not allowed to puddle. Do not apply if precipitation is expected within four hours, or if rain has preceded the application in the past 12 hours.

Test compatibility with natural or synthetic stone Over-application may cause a slight darkening of the surface or leave a sticky residue on the surface. Do not apply in high winds. Do not dilute.

Please refer to the safety data sheet (SDS) for more detail.

# SHELF LIFE

Containers are to be sealed and stored in a clean, dry area between 45-85°F (6-29°C). Keep from freezing. Shelf life is 24 months in unopened containers.

# **TECHNICAL SERVICES**

For assistance, contact technical services at: 866-791-8700 www.specchemllc.com

#### WARRANTY

# NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

#### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

#### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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