

WEATHER WORKER™ S-100 (J-29-A)

PENETRATING SILANE SEALER V.O.C. COMPLIANT.

PRODUCT DESCRIPTION:

Weather Worker S-100 (J-29-A) is a proprietary, 100% silane that penetrates into concrete or masonry and provides true long term weatherproofing protection. Weather Worker S-100 is a single component product that is ready to use and typically requires only one application. The small silane molecule can penetrate deeper into the substrate than conventional sealers and even deeper than a typical siloxane sealer. Once the silane molecule penetrates the surface it chemically reacts with, and bonds to, the concrete or masonry substrate.

As a result of the strong chemical bond and the silane molecule being buried in the substrate (away from the damaging effects of the sun and weather), the silane waterproof protection will last much longer than conventional coatings. Weather Worker S-100 will not darken the surface or leave a visible surface film. It is ideal for aesthetic/architectural surfaces.

In independent testing, Weather Worker allowed perfect moisture vapor transmission (breathing) of the substrate. The ability to breathe helps prevent potential freeze thaw damage to the substrate.

PURPOSE:

Weather Worker S-100 provides outstanding long term weatherproof protection for all types of concrete and masonry surfaces. In independent testing done according to the N.C.H.R.P. Report 244 (for State Highway Departments and Federal Highway Administration), Weather Worker S-100 passed the water absorption phase (Series II) and the accelerated weather phase (Series IV). During the test, Weather Worker S-100 reduced chloride ion intrusion into the concrete by over 90%. This type of protection will dramatically increase the life expectancy of concrete and masonry.

S-100 dries quickly, allowing traffic to resume over the treated surface. It can be applied in cold temperatures down to 32°F (0°C).

Weather Worker S-100 protects the following types of new or old structures:

- Cast-in-place concrete
- Precast and prestressed concrete
- Exposed aggregate
- Brick, mortar, stucco, sandstone

Weather Worker S-100 prevents or inhibits:

- Moisture penetration
- Attack by deicing salts and chlorine ions
- Reinforcing steel and precast anchor corrosion leading to rust staining

Mildew and leaching

Attack by airborne industrial chemicals

Spalling caused by freeze-thaw cycles

Efflorescence

Surface scaling

ADVANTAGES:

Small silane molecules result in deep penetration

Outstanding protection against deicing salts and chloride ions (over 90% reduction)

No masking or cleaning of windows

No color change – will not darken surface

Strong chemical bond to the substrate

Can be applied down to 32°F (0°C).

Dries quickly – open to traffic within one hour

Improves adhesion for solvent based paints

Extended warranties are available with

Weather Worker S-100. Contact Dayton Superior.

SPECIFICATIONS:

- Percent silane – 100%
- N.C.H.R.P. Report 244
- Series II – Reduced the average weight gain of 15% NaCl water by 87%
- Series IV – Accelerated weathering reduced average chloride ion content by 94%
- Vapor Transmission – Excellent, no moisture retained after 21 days
- Freeze-Thaw – ASTM C-672 - 50 cycles
- Treated Sample – +0
- Control – 5

APPLICATION INSTRUCTIONS:

Preparation - New concrete must be cured a minimum of 28 days. Use wet burlap cure or cure with Dayton Superior Day-Chem Sil-Cure (J-13). Other curing compounds may not be compatible. Tuckpointing must cure a minimum of 3 days and caulking should be fully cured before applying Weather Worker.

Concrete surfaces should free of dirt, oil, grease, and other contaminants. New concrete surfaces may only require sweeping, however, if construction traffic has been excessive, washing with 2,000 psi (13.7 MPa) pressure cold water may be necessary.

Refer to www.daytonsuperior.com for latest Technical Data Sheet and MSDS
7777 Washington Village Dr., Suite 130, Dayton OH 45459
Customer Service: (888) 977-9600
Technical Assistance: (866) 329-8724

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On older concrete surfaces, sandblasting, shotblasting or high pressure cold water (7,000 to 10,000 psi) (48.3 to 69.0 MPa) may be used. Chemical cleaning or high pressuring hot water can also be used. Rinse thoroughly after chemical cleaning.

The surface pores must be opened sufficiently to allow immediate penetration of Weather Worker S-100 into the clean surface. If it is not immediately absorbed into the surface, additional cleaning may be necessary.

Installation - The concrete surface should be completely dry prior to application. Allow the surface to dry at least 24 hours with sunshine. Do not apply below 32°F (0°C) or above 100°F (38°C). Do not apply if rain is expected within 3 hours. Do not apply during windy conditions.

Cover and protect all grass, shrubs, plants and other vegetation from Weather Worker overspray. Protect all asphalt based materials and painted surfaces.

Apply a single application of Weather Worker S-100 with low pressure spray equipment (15 psi or .1 MPa), roller or brush. Use a fan type spray nozzle for best efficiency. Mist spraying is inefficient and will waste material. On vertical surfaces, apply the material from the bottom of the wall upwards spraying so that it will run down the surface at least 6 inches (115 cm) below the spray pattern. On horizontal surfaces the material should be sufficiently applied to completely flood the surface, approximately 300 FT²/gal. (7.4 M³/L), depending on the porosity of the concrete. Typically, the surface can be opened to traffic in 1 hr., if the temperature is at 72°F (22°C) or above. Open containers of Weather Worker S-100 should be tightly resealed when not in use. The full chemical reaction of the silane will take 5 days. Do not expect a water beading effect until after the full chemical reaction.

APPROXIMATE COVERAGE RATES:

	FT ² per Gallon	M ² per Liter
Brick	250-375	6.1-9.3
Cast-in-Place	250-375	6.1-9.3
Precast Concrete	300-375	7.4-9.3
Exposed Aggregate	250-375	6.1-9.3
Stucco	250-375	6.1-9.3
Brick	180-300	4.4-7.4
Rough Stone	250-375	6.1-9.3
Smooth Stone	375-450	9.3-11.1
Glazed Brick	375-450	9.3-11.1

DRYING TIME:
1 hr. at 70°F (21°C)

PACKAGING:
1 gal. cans (3.8L), 5 gal. pails (18.9L) and 55 gal. drums (208L).

CLEAN-UP:
Tools and Equipment - Pump water through the spray equipment.

LIMITATIONS:
Apply Weather Worker S-100 only between 32°F and 100°F (0°C and 38°C)

Do not apply to wet surface. Do not spray on plastic or specialty coated glass. Do not use on porous concrete block. The shelf life of an unopened container of Weather Worker S-100 is approximately 1 year. Keep containers tightly sealed when not in use. Store in a dry location with a temperature range of 0°F to 110°F (-18°C to 43°C)

WARNING:
Use with adequate ventilation
Keep out of the reach of children
Use a NOISH approved respirator, when necessary
Do not take internally
In case of ingestion, CALL A PHYSICIAN immediately.
DO NOT induce vomiting

Flammable Mixture. If splashed in the eyes, flush thoroughly with clean water for a minimum of 15 minutes. CALL A PHYSICIAN immediately. May cause irritation to the skin. If brought into contact with the skin, wash thoroughly with soap and water. Seek medical attention if redness or irritation occurs. Avoid breathing vapors and spray mist. Keep away from heat, spark, open flame and other possible sources of ignition. Reseal container after each use. Wear protective clothing, gloves, and goggles. Safe disposal of rags is necessary to avoid possibility of spontaneous combustion. Read MSDS before using product.



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CONTINUED

MANUFACTURER

Dayton Superior Corporation
7777 Washington Village Dr., Ste. 130
Dayton, OH 45459
Customer Service: 877-977-9600
Technical Services: 866-329-8724
Website: www.daytonsuperior.com

WARRANTY

Dayton Superior Corporation ("Dayton") warrants for 12 months from the date of manufacture or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Dayton, the product is free of manufacturing defects and conforms to Dayton's product properties in force on the date of acceptance by Dayton of the order. Dayton shall only be liable under this warranty if the product has been applied, used, and stored in accordance with Dayton's instructions, especially surface preparation and installation, in force on the date of acceptance by Dayton of the order. The purchaser must examine the product when received and promptly notify Dayton in writing of any non-conformity before the product is used and no later than 30 days after such non-conformity is first discovered. If Dayton, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the non-conforming product, refund the purchase price or issue a credit in the amount of the purchase price. This is the sole and exclusive remedy for breach of this warranty. Only a Dayton officer is authorized to modify this warranty. The information in this data sheet supersedes all other sales information received by the customer during the sales process. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

LIMITATION OF LIABILITY

Dayton shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injury), or economic losses of any kind; or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, its obligations under any contract for sale of product, even if Dayton could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this contract, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

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