T E C H N I C A L D A T A

SPECTILT 100

Premium reactive solvent-based cure/bond breaker

DESCRIPTION

SPECTILT 100 is a chemically reactive tilt up cure/bond breaker specially engineered to provide a clean, easy lift of tilt-up panels. SPECTILT 100 is formulated with a solvent blend allowing fast-drying, solvent-base performance..

- Fast-drying for improved productivity
- Chemically reactive
- Clean panels - no residue, stain, or discoloration
- Resists foot traffic abrasion

APPLICATION

Mix Design: The frequent use of Type 1L cement and pozzolans (flyash and slag) in casting beds and panel concrete typically slow the rate of hydration, and may delay or reduce bleed making the casting bed and panel concrete more susceptible to drying shrinkage and increase surface porosity at the time of the SpecTilt application. This increased porosity will require an additional cure coat or bondbreaker coat to achieve adequate hold-out prior to pouring panels.
The use of SpecChem "IntraFilm" as a finishing aid will help reduce porosity, and facilitate finishing for denser, tighter slabs.

Curing New Concrete:
Ready-to-use. Do not dilute. When used as a cure, SPECTILT 100 should be applied immediately after the final steel troweling, after the surface water has disappeared. Waiting too long to apply the cure coat can result in porous, dry casting slabs that will not yield favorable results. The entire slab must be completely covered. When applied on tightly steel troweled concrete, SPECTILT 100 meets the moisture retention requirements of ASTM C-309. Typical application for curing is 200-400 sq-ft/gal.

Bondbreaker Coat:
Casting slab must be properly cured, smooth, and dense. Remove all dust, dirt, and other contaminants prior to application. SPECTILT 100 should be applied just prior to placing reinforcing steel and within two weeks of pouring panels. Spray apply at 400 sq ft per gallon or to the point of rejection. Wait until dry and then apply a second coat at right angles to the previous coat. Coverage rate of second coat is typically 500 - 700 sq ft per gallon. Complete uniform coverage is necessary on casting slab. If treated slab appears uneven or has light colored spots, this may indicate a porous slab that requires additional applications of bond breaker. If after additional applications, these light spots persist, thoroughly wet affected areas with water to fill concrete pores. Squeegee off excess water and then immediately reapply SPECTILT 100 . Allow bond breaker to thoroughly dry. An adequate application is indicated only by the presence of a dry soap like feel apparent to the touch over the entire treated slab. Do not allow foot traffic until the slab is thoroughly dry.

APPLICATION (con't)

Bondbreaker Coat on Old or Water Cured Concrete:
Verify that the concrete surface is free of curing compounds or other substances that could adversely affect the performance of SPECTILT 100 The slab must be smooth, dense, well cured and clean. Prior to placing reinforcing steel and within two weeks of pouring panels, flood casting slab surface with clean water. Squeegee off excess water and immediately apply SPECTILT 100 to the damp slab to the point of rejection, typically 300 - 500 sq ft per gallon. Allow to dry and then apply a second coat at the same rate but at right angles to the previous coat. Allow to thoroughly dry. As before, if light colored areas appear after drying, a porous slab may be indicated and reapplication will be necessary. The application rate can vary greatly depending upon the porosity of the slab and the ambient conditions. Do not under or over apply. It is the contractor's responsibility to ensure the even presence of SPECTILT 100 at the surface of the casting slab prior to pouring concrete. Do not allow foot traffic until the slab is thoroughly dry.

Before Pouring Concrete:
Verify that the entire treated surface has a dry soap like feel to the touch. Test casting slab by sprinkling a few drops of water in several places. The water should bead up like on a newly waxed car. In hot and/or dry weather, mist or fog the entire slab with water prior to pouring. Avoid scouring the casting slab surface by using a deflection board. Heavy rains or rains prior to bond breaker coats drying may necessitate reapplication.

Stack Panels:
Extra care must be used with stack panels as they tend to transfer water across their interface, increasing the possibility of the "osmotic effect" that leads to sticking. It is recommended that SPECTILT 100 be applied as the cure coat @ 200-250 sq-ft per gallon prior to the bond breaker coat between each layer to decrease the chance of sticking.

Painting of Panels:
If SPECTILT 100 has been properly applied and has not been over applied, painting of the panels can be performed as soon as the moisture content in the concrete is at an acceptable level for the paint manufacturer. Coating manufacturer's instructions for surface preparation and application must be followed and supersedes information in the data sheet.

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Other Instructions:
Not recommended for use as a bond breaker on broom or rough finished concrete surfaces. Spray apply for best results. Job site conditions can vary greatly. Always ensure the complete presence of bond breaker prior to pouring panels.

Please contact SpecChem technical service for special instructions when using concrete mixes containing pozzolans (slag, flyash).

Hot Weather Tips for Tilt-Up

Cure And Bond Breaker Application
Hot weather can cause premature drying of the concrete casting slab surface, causing it to be overly-porous, exhibit cracking and crazing and have reduced surface strength. The use of an evaporation retardant such as **SpecFilm**, can greatly reducing the possibility of plastic shrinkage cracking, crazing, and uneven/wavy surfaces. One of the best ways to offset the effects of hot weather is with modified curing and bond breaker application techniques. SpecChem makes the following recommendations when using **SpecTilt 100:**

1) Apply the **SpecTilt 100** cure coat **immediately** after final finishing and preferably prior to control joint cutting. Apply to the point of uniform surface film accumulation. Slabs with exceptionally porous surfaces or rougher finishes may require heavier applications to ensure adequate holdout and uniform surface accumulation. The cure application is the most critical to assure an adequate base for the subsequent bond breaker coats. In hot weather, the proper timing and application rate are essential and the cure coat should be applied at a minimum 250-300 sq-ft per gal.

2) Immediately before application of the **SpecTilt 100** bond breaker coats, saturate the casting slab surface with water, thoroughly removing the excess water with a squeegee or compressed air. This practice is especially recommended if the slab was improperly cured, the application of the cure coat was delayed or if the slab is suspected of being porous. This step allows the water to "take up" any remaining porosity just before the bond breaker coats are applied.

3) Apply successive **SpecTilt 100** bond breaker coats until the casting slab surface appears uniformly dark for a minimum of 2-4 hours and has a dry, soapy feel in all areas. Do not allow **SpecTilt 100** to accumulate in low spots or depressions.

Panel Concrete Placement: Very porous casting slabs can cause the "osmotic effect" to occur, even when adequate bond breaker has been applied. The "osmotic effect" refers to the natural tendency of water to migrate from wet to dry. This means that when fresh panel concrete is placed on a porous casting slab, water will migrate from the fresh concrete into the dry casting slab, leaving the wall panel surface concrete without adequate water for proper hydration. This can result in dusting or skin pull off on the panel surfaces.
To minimize the osmotic effect **immediately** prior to placement of the panel concrete, saturate the casting slab with water, thoroughly squeegee off or blow off the excess water with compressed air. No surface water should be present on the casting bed surface prior to panel concrete placement.

LIMITATIONS/PRECAUTIONS

When spraying SPECTILT 100 keep pressure in pump up sprayers as high as possible to ensure a steady and even spray pattern. Maintain the sprayer tip near the concrete, within 12 inches.
Avoid over application. SPECTILT 100 must be completely dry prior to pouring concrete. Do not walk on bond breaker until completely dry. For best performance, mist the pour area with water immediately before pouring concrete.
Can be applied below freezing (32°F) provided the concrete is free of frost or any contaminants prior to application.
Do not store below 20ºF without conditioning at room temperature for 24 hours prior to application.

DO NOT CUT OR WELD CONTAINER
COMBUSTIBLE LIQUID
KEEP AWAY FROM OPEN FLAME
INDUSTRIAL USE ONLY-Additional precautions, safety information and first aid are contained in the Safety Data Sheet.

CLEANING

Tools, sprayers, and any dried bondbreaker may be cleaned with **SpecChem Orange Peel** or **SpecChem Berry Clean**. With proper application, the casting slab and panels will not require cleaning, but may be washed with a mild detergent or power washed to remove any over application.

SHELF LIFE

Store material in the original tightly closed containers. Moisture allowed to contaminate open drums may cause gelling. Do not allow the accumulation of water, dirt, or other contaminants. The shelf life of properly stored SPECTILT 100 is two years from the date of manufacture.

PACKAGING

SPECTILT 100 is packaged in 55 gallon drums and 5 gallon pails.

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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