TECHNICAL DATA

SPECTILT 100

Premium reactive solvent-based tilt-up 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 contains no diesel, kerosene, waxes or silicones.

- · Clean panels lift easier, no resin stains
- Chemically reactive
- · Leaves no residue, stain or discoloration
- Resists foot traffic abrasion

APPLICATION

Curing New Concrete:

Ready-to-use. Do not dilute. When used as a cure, SPEC-TILT 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 rate for curing is 200-400 sq-ft/gal.

Dry Time: approx 2 hours @ 70°F. Cooler temperatures, higher humidity and heavier application rates will extend dry time.

Bondbreaker Coat:

Casting slab must be well 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 @ 400 sq ft per gal 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 gal. 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.

Bond breaker Coat on Old or Water Cured Concrete:

Verify that the concrete surface is free of curing compounds, salts 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 point of rejection. Wait until dry and then apply a second coat at right angles to the previous coat.

APPLICATION (cont.)

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. It is the contractors 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:

Ensure 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. Fog the entire slab with water prior to pouring. When pouring concrete, 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" thus leading to sticking. It is recommended that SpecChem Cure & Seal 25 or Cure & Seal WB be applied as the cure coat prior to the bond breaker coat between each layer to lessen 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.

Other Instructions:

Do not apply in rain or if rain is forecast within 12 hours of application. Panels exposed to rain may require reapplication @ 500-700 sq-ft per gal. Not recommended for use as a bond breaker on broom or rough finished concrete. Spray apply for best results with a low pressure sprayer (Chapin, Hudson, etc) with a 1/2 gal/min tip in a fine uniform spray pattern. 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).



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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 **Spec Tilt 100** Cure and Bond Breaker:

- 1) Apply the **Spec Tilt 100** cure coat <u>immediately</u> 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 **Spec Tilt 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 **Spec Tilt 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 **Spec Tilt 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. In simple terms, 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 <u>immediately</u> prior to placement of the panel concrete, saturate the casting slab with water, <u>thoroughly squeegee off or blow off the excess water</u> with compressed air. No surface water should be present on the casting bed surface prior to panel concrete placement.

CLEANING

Tools, sprayers and other equipment may be cleaned with mineral spirits or other approved solvents. 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.

LIMITATIONS

Avoid over applications. 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. Do not apply below freezing (32 F).

Important: If the concrete is cured <u>without</u> using a Spec-Chem bond breaker or <u>without</u> an ASTM C 309 membrane forming curing compound, please contact a Spec-Chem representative.

DO NOT EXPOSE TO OR APPLY NEAR FIRE OR FLAMES. FOR WELL VENTILATED OR EXTERIOR USE ONLY!

PACKAGING

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

SHELF LIFE

Store material in the original tightly closed containers horizontally to 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 manufacturer. Keep from freezing.

PRECAUTIONS

DO NOT CUT OR WELD CONTAINER KEEP AWAY FROM OPEN FLAME INDUSTRIAL USE ONLY

Additional precautions, safety information and first aid are contained in the Material Safety Data Sheet.

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.

INHERIT RISK

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



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