TECHNICAL DATA SHEET

SpecTilt EX

Quick-Drying Reactive VOC/OTC-Compliant Solvent-Based Cure/Bond Breaker

DESCRIPTION

SpecTilt EX is a chemically reactive tilt-up cure/bond breaker specially engineered to provide a clean, easy lift of tilt-up panels. SpecTilt EX is formulated with a unique solvent blend allowing fast-drying, solvent-based performance along with VOC compliance in the OTC/LADCO/MRPO regions.

BENEFITS

- Fast-drying for improved productivity in cool, damp climates
- Chemically reactive
- Clean panels – no residue, stain or discoloration
- Resists foot traffic abrasion
- OTC/VOC compliant < 350 g/L

MIXING INSTRUCTIONS

Ready to use. Do not dilute.

APPLICATION

Mix Design: The frequent use of Type IL cement and pozzolans (fly ash and slag) in casting beds and panel concrete typically slows the rate of hydration and may delay or reduce bleed, making the casting bed and panel concrete more susceptible to drying shrinkage and increasing surface porosity at the time of the SpecTilt application. This increased porosity will require an additional cure coat or bond breaker coat to achieve adequate holdout 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: When used as a cure, SpecTilt EX 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 EX meets the moisture retention requirements of ASTM C309. Typical application rate for curing is 200–400 sq ft/gal.

Bond Breaker Coat: The casting slab must be properly cured, smooth and dense. Remove all dust, dirt and other contaminants prior to application. SpecTilt EX should be applied just prior to placing reinforcing steel and within two weeks of pouring panels. Spray apply at 400 sq ft/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 the second coat is typically 500–700 sq ft/gal.

Complete, uniform coverage is necessary on the casting slab. If the treated slab appears uneven or has light-colored spots, this may indicate a porous slab that requires additional applications of bond breaker. If these light spots persist after additional applications, thoroughly wet the affected areas with water to fill the concrete pores. Squeegee off excess water and then immediately reapply SpecTilt EX. Allow the bond breaker to thoroughly dry. An adequate application is indicated only by a dry, soap-like feel over the entire treated slab. Do not allow foot traffic until the slab is thoroughly dry.

Bond Breaker 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 EX. The slab must be smooth, dense, well cured and clean. Prior to placing reinforcing steel and within two weeks of pouring panels, flood the casting slab surface with clean water.

Squeegee off excess water and immediately apply SpecTilt EX to the damp slab to the point of rejection, typically 300–500 sq ft/gal. 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 EX 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 the casting slab by sprinkling a few drops of water in several places. The water should bead up like water 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 rain before the bond breaker coats have dried, 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 EX be applied as the cure coat at 200–250 sq ft/gal prior to the bond breaker coat between each layer to decrease the chance of sticking.

Painting of Panels: If SpecTilt EX 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. The coating manufacturer's instructions for surface preparation and application must be followed and supersede the information in this data sheet.

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, fly ash).

HOT WEATHER TIPS FOR TILT-UP

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 reduce 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 EX:

1) Apply the SpecTilt EX 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, proper timing and application rate are essential, and the cure coat should be applied at a minimum of 250–300 sq ft/gal.

2) Immediately before application of the SpecTilt EX 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 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 EX 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 EX 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, immediately prior to placement of the panel concrete, saturate the casting slab with water, and then 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.

COMPLIANCE/STANDARDS

- Meets the moisture retention requirements of ASTM C309 when applied on tightly steel-troweled concrete
- VOC compliant < 350 g/L in the OTC/LADCO/MRPO regions

COVERAGE

Application	sq ft/gal
Cure coat	200–400
Cure coat, hot weather (minimum)	250–300
Bond breaker, first coat	400 or to rejection
Bond breaker, second coat	500–700
Old/water-cured concrete, each coat	300–500
Stack panel cure coat	200–250

The application rate can vary greatly depending upon the porosity of the slab and the ambient conditions.

CLEANING

Tools, sprayers and any dried bond breaker may be cleaned with SpecChem Berry Clean in OTC-, SCAQMD- and LADCO-VOC-regulated areas, or SpecChem Orange Peel. 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.

PACKAGING

55-gallon drums

5-gallon pails

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 EX is two years from the date of manufacture.

LIMITATIONS

SpecTilt EX dries much faster than standard solvent-based products.

Tip: When spraying SpecTilt EX, 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 EX 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 20 °F without conditioning at room temperature for 24 hours prior to application.

PRECAUTIONS

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

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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