

TITAN HARD

COMBINATION HARDENING, DUSTPROOFING & SEALING

PRODUCT DESCRIPTION

Titan Hard is a colorless, odorless solution of specialized reactive chemicals that penetrate concrete surfaces to seal, densify and harden the material. Titan Hard is a water based product and as a result is V.O.C. compliant in every region of the country and environmentally safe to use. Titan Hard penetrates the concrete surface and undergoes a chemical reaction that turns the concrete substrate into a hardened, densified mass. Surfaces treated with Titan Hard are not only more abrasion resistant, but are more resistant to chemicals and water than untreated concrete.

Titan Hard, because it penetrates the surface and chemically bonds, will last for an extended period of time. Edoco will supply long term warranties for Titan Hard; contact Edoco for details. Titan Hard has a combination of water-based safety, ease of use and long term performance that make it an attractive alternative to currently available sealer-type products. Titan Hard represents an advanced technology in concrete treatments.

USE

Titan Hard is a premium product for hardening, dustproofing and sealing of concrete. It is excellent for concrete floor applications where long term resistance to dusting, black rubber tire marks and water is important. Titan Hard, because it penetrates the surface and becomes an integral part of the substrate, does an excellent job of sealing and hardening for a long time and as a result will help prevent efflorescence.

Titan Hard is suitable for both interior and exterior applications.

Ideal applications include, but are not limited to, industrial plants, warehouses, schools, factories, hospitals, malls, food processing plants, textile mills, freezers, water and sewage treatment plants, parking decks, airports and stadiums.

BENEFITS

- Long Term Warranty Available*
- Seals, hardens and dustproofs
- Resists black rubber tire marks on floors
- Lasts longer than topical floor coatings
- Will not scratch or peel
- Environmentally safe
- Water Based, V.O.C. compliant
- No odor, no fumes
- USDA approved for incidental food contact
- Develops a more polished look with age

*Contact Edoco for details prior to application

APPLICABLE STANDARDS

Active Ingredients: 100% of total solids
Specific Gravity: 1.2
Film: 0
Flash Point: None
V.O.C. Content: 0 gm/liter
Skid Resistance: Good
Depth of Penetration: as much as 5mm into concrete

Water Absorption: ASTM C-642
3.4% in 24 hours
Leading Competitor – 4.25% in 24 hrs

Compressive Strength: ASTM C-140
Concrete treated with J-17 – 3,910 psi (27MPa) average
Untreated concrete – 3,461 psi (23.9 MPa) average

Water Vapor Transmission Rate –
217 grams/sq. ft. – 24 hours

APPLICATION

Apply only when temperatures are above 40°F (4°C). Avoid contact with glass, aluminum and polished metal surfaces. If contact occurs, wash immediately with water.

New Concrete [interior]: After finishing is complete, cure the concrete in accord with ACI 302 by one of the following methods: water (2.4.1.1), plastic sheeting (2.4.2.1) reinforced paper (2.4.2.2) or membrane-forming cure (2.4.2.3). If a membrane-forming cure is used it will require removal prior to the application of the Titan Hard. Apply the Titan Hard after the specified time of curing has been reached, but no sooner than 7 days, according to the "Old Concrete" instructions.

Old Concrete interior/exterior: All surfaces to be treated must be clean and sound. Remove all membrane forming curing compounds, sealers, oil, grease, dirt and other contaminants. For best results, remove any concrete laitance and patch or fix all cracks and damaged areas. Apply Titan Hard to point of rejection (by spray, roller, brush or pouring), working it in using a soft bristle broom or mechanical scrubber. Work in this manner until the product begins to thicken, usually in 15-30 minutes, depending on the surface and ambient temperatures, then rewet with water and work for another 5-10 minutes. Thoroughly rinse and then squeegee or brush off excess material until dry. On porous or rough surfaces, a second application may be required.

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

12/05/08 • For Commercial/Industrial Use Only • Page 1 of 2

TITAN HARD

If a second coat is required, immediately apply it in a similar manner as the first coat. Do not allow the treated surfaces to dry between applications.

The use of a mechanical scrubber will increase the effectiveness of the application. The treated surface will develop a "polished" appearance over time.

Tilt-Up Construction: Contact the Edoco Technical Services Department for use of the Titan Hard with Edoco bond breakers.

CLEAN UP

Immediate and thorough flushing with clean water.

ESTIMATED COVERAGE

First Coat: 200 sq. ft. per gal. (4.9 m²/L)

Second Coat: 300 - 400 sq. ft. per gal. (7.4 - 9.8 m²/L)
(if necessary)

Texture and absorption of surface will determine final coverage rates. Porous concrete surfaces may require additional material.

DRYING TIME

Approximately 2-4 hrs. at 70°F (21°C) with good air circulation.

PACKAGING

ITEM #	Package	Size	
		Gals.	Liter
68086	Gallon	1	3.8
68084	Pail	5	18.9
68082	Drum	55	208

LIMITATIONS

Ponded or puddled material must be removed by squeegee or brush, otherwise white residue will appear on the surface. If white residue starts to appear on the surface during drying, immediately remove with hot water and scrubbing. Floors are slippery during application. If Titan Hard is accidentally applied to glass, aluminum or polished metal, immediately rinse with water to prevent etching. Porous, low quality concrete substrates or floors with a rough surface may not develop a "polished" appearance over time.

Keep containers of Titan Hard from freezing. For colored concrete, contact Edoco. A test installation is recommended. Shelf life is one year.

PRECAUTIONS

Use with adequate ventilation. Keep out of the reach of children. Floor is slippery until dry. Do not take internally. In case of ingestion, CALL A PHYSICIAN immediately. DO NOT induce vomiting. 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. Reseal container after each use. Wear protective clothing, gloves, and goggles. Read MSDS before using product.

MAINTENANCE

Mop or use mechanical scrubbing with detergents or water. The DP Maintenance Cleaner and DP Maintenance Cleaner Plus are also excellent for cleaning & maintenance of a Titan Hard treated floor. Mopping or scrubbing the floor will prolong the life of the floor, as well as increase the "polished" look. Wipe up chemical spills as soon as possible.

MANUFACTURER

Dayton Superior Corporation
7777 Washington Village Dr., Ste. 130
Dayton, OH 45459
Customer Service: 888-977-9600
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.

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

12/05/08 • For Commercial/Industrial Use Only • Page 2 of 2

