



# DaiHard® 100

## INDUSTRIAL STRENGTH EPOXY FLOOR COATING



For interior concrete floors that demand the highest performance, **DaiHard100 Industrial Strength Epoxy Floor Coating** is the choice for heavy-duty, industrial strength epoxy durability, wear-resistant beauty and easy maintenance. It's a self-priming formula that can be used on new or old uncoated or previously coated industrial concrete floors exposed to foot and vehicular traffic, as well as intermittent chemical spills, and pressure washing.

Utilizing a modified two-part "100% solids" epoxy chemistry that has been proven for years on **automotive, commercial and industrial floor surfaces**, this coating delivers excellent abrasion, impact and chemical resistance.

In turn, DaiHard100 also delivers superior results on the most demanding residential surfaces too — like **garage floors, workshops, basements and more.**

DaiHard100 is easy to apply by roller or epoxy application squeegee. It goes on smoothly with excellent hiding power in one coat.



### DaiHard-100 Epoxy System - Primary Benefits

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| <ul style="list-style-type: none"> <li>• industrial strength performance</li> <li>• hard, impact-resistant surface</li> <li>• two pre-tinted colors</li> <li>• excellent one-coat hiding</li> <li>• salt &amp; chemical resistance</li> </ul> | <ul style="list-style-type: none"> <li>• up to <b>60 minute</b> pot-life</li> <li>• low-odor, zero-VOC formula</li> <li>• <b>NO HOT-TIRE PICKUP</b></li> <li>• Compatible 100% solids epoxy clear top-coat available for showroom shine and added strength</li> </ul> |
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**DESCRIPTION:** Pre-tinted, odorless epoxy flooring system for concrete.

- garage floors
- utility floors
- laundry rooms
- workshops
- basement floors
- warehouses
- commercial floors
- service corridors
- industrial floors

**COLORS:** Two factory-tinted colors available – GRAY and TAN – with matching decorative broadcast flakes.

**AVAILABLE SIZES:** DaiHard-100 comes in a 3.7 Qt. combined volume kit. For larger projects, DaiHard-100 is also available by special order in 2.5 gallon and 5-gallon configurations.

#### KIT CONTENTS:

- 2.7 quarts of DaiHard Epoxy Resin (Part - A)
- 1 quart DaiHard Epoxy Hardener (Part - B)
- decorative flakes – (also adds slip resistance)
- stir stick
- Cleaning crystals

**APPLICATION:** Roll onto clean, dry concrete with a 10mm nap lint free roller — or epoxy applicator squeegee followed by back-rolling.

**COVERAGE:** Averages 250 sq.ft. per kit. Varies with substrate and application thickness.

**STORAGE:** Store this kit indoors in a cool dry place. Do not store outdoors in sheds, trucks, etc.

#### TOOLS:

**SQUEEGEE:** Use a quality rubber squeegee (eg. DAICH Epoxy Squeegee Applicator)  
**ROLLER:** Use a lint free 3/8" nap roller for smoother floors. 1/2" nap roller for pitted or textured floors.

**\*\*OPTIONAL TOOL CHOICE:** DAICH Professional Epoxy Applicator Kit.

#### CHEMICAL RESISTANCE

- gasoline
- motor oil
- garden chemicals
- paint thinner
- salt

- brake fluid
- transmission fluid
- acetone
- sulphuric acid
- hydrochloric acid

#### PHYSICAL PROPERTIES

- Cure time: 24 hours
- Tack-free time (average): 16 hours
- Re-coat: perform prior to cure
- Compressive strength: 12,500 psi
- Tensile Strength: 8,100 psi

# TECHNICAL DATA

Product Type: Amine Epoxy

Mix ratio (by volume): 1.9 : 1

Less than gallon mix ratios by volume:

8 oz. mixed: 5.25 oz "A" / 2.75 oz "B"

16 oz. mixed: 10.5 oz "A" / 5.5 oz "B"

32 oz. mixed: 21 oz "A" / 11 oz "B"

Induction: None Required

Pot Life: 60 minutes @ 70°F, 45 minutes @ 80°F,

20 minutes @ 90°F

Gloss Level: Gloss

Percent Solids: 100%

Weight/Gallon: 9 lbs.

Thinner: DO NOT THIN PRODUCT

Clean-Up: Xylene or epoxy thinner

Recommended Film Thickness:

Wet: 5 - 20 mils

Spread Rate (Theoretical):

80 - 320 sq. ft./gal. @ 5 - 20 mils dry.

Dry Time: 60°F (15°C) / 70°F (21°C) / 90°F (32°C)

To Touch: 14 hrs. / 12 hrs. / 12 hrs.

Tack-free: 18 hrs. / 16 hrs. / 15 hrs.

Recoat Time: after 18 - 24 hrs. cure

Driveable: 48 - 72 hrs.

Flash Point (Pensky-Martens): > 200°F (93°C)

Dry Temperature Resistance: 200°F (93°C)

## SURFACE PREPARATION

### Bare Concrete:

Surfaces to be coated must be clean and dry and free of dust, grease, curing compounds and other contaminants that may block adhesion. Newly poured concrete must cure at least 30 days prior to coating application. Very dense, non-porous or chemically treated concrete may require mechanical methods such as a concrete grinder to remove any bond barriers and open the pores for optimal penetration. Porosity can be tested by applying one or two ounces of water onto the concrete. If water is absorbed, the pores are open. If water beads, the surface is not porous and requires additional treatment.

**Wash the surface with the enclosed cleaning crystals dissolved in a container of 2 gallons (8l) of water or a strong TSP (trisodium phosphate) solution** to remove oil, dirt, grease and other chemical contaminants. Remove surface dirt with a pressure washer (min. 2500 p.s.i.) and then scrub the concrete with the cleaner/etcher or TSP. A second scrubbing may be required for more soiled or impacted floors. Remove all rinse water with good drainage or a wet vac to lift water off the surface. **\*\*For most aggressive etching, a mix of 2 parts water : 1 part muriatic acid can be used. (Add acid into water, NOT water into acid.) Wear eye protection, gloves and protective clothing. Follow all safety directions.** Apply etching solution uniformly using a plastic sprinkler can and scrub with a stiff broom. When fizzing stops,

rinse well with clean water and while again scrubbing with a stiff broom to remove loose etching residue (or, alternatively, a pressure washer with min. 2500 p.s.i.). Remove all rinse water with good drainage or a wet vac to lift water off the surface. Let the surface dry thoroughly (ideally below 12% moisture content).

Vacuum any dry, loose residue. If a moisture meter is not available to test concrete water content, an alternate test method would be to tape a 14" x 14" piece of plastic to the surface, sealing the plastic on all sides for air tight closure. After 24 hours, if the concrete beneath the plastic is darker in color than the surrounding area, or if there are water droplets on the plastic, this indicates excessive moisture in the slab which must be removed before coating is attempted.

### Coated Concrete:

If the concrete is covered with a previous coating that is still sound, it can be coated with DaiHard100. Scrape up any and loose or peeling paint and scuff the existing paint with sandpaper to add bonding profile for maximum adhesion. Wash the floor thoroughly to remove any dirt, grease, oil, etc. from the surface. Allow it to dry completely before coating application.

## APPLICATION

### Mixing:

Mix the Part "A" epoxy base for about 30 seconds prior to blending with the Part "B" hardener. Pour the entire contents of Part B into the Part A container, scraping the sides and bottom of both containers to ensure that all is incorporated during mixing. Stir for three minutes. **USE A DRILL MIXER ON MEDIUM SPEED FOR BEST BLENDING.** Immediately after mixing, begin application.

### Application:

Ambient air, material and floor temperatures are important factors which will determine pot life and work time of the blended epoxy coating. Temperatures should be between 60-90°F (15.5-32°C) for approximate pot life as follows: 60 minutes @ 70°F (21°C), 45 minutes @ 80°F (26°C), 20 minutes @ 90°F (32°C). Do not leave mixed epoxy in the container where the mixture will rapidly heat up and reduce pot life. Immediately pour the activated epoxy into paint trays and begin roller application (using a 3/8" roller) OR pour some mixed epoxy directly onto the floor and spread it out with a squeegee applicator in manageable 100 sq.ft. sections followed by back rolling with a 3/8" nap roller to even out the coating. Keep going until all mixed epoxy is applied. Do not overwork the applied coating or disturb already applied sections as this may insert air bubbles or impact color uniformity of the dry finish.

**\*\*IMPORTANT:** To avoid applying unblended epoxy material onto the floor (which can result in uncured sticky or soft areas) **DO NOT scrape the inside of the container after mixing** when emptying contents into a paint tray or onto the floor. Also, do not leave the epoxy container upside down to drain out, which may deposit unblended material onto the floor. **Use only well mixed and activated epoxy that pours freely out of the can on its own.\*\***

### Residential Garage Floors & Light Duty Industrial:

For most residential garage and other interior concrete surfaces, as well as industrial floors subject to light fork lift traffic, one coat of self-priming DaiHard100 will provide good results with an coverage rate of 250 sq.ft. per kit.

### Heavy-Duty Industrial Floors:

For heavier duty industrial floors subject to daily forklift traffic, an initial priming coat is recommended for best performance. This can be achieved with a first thin application (roughly 4 mils) of DaiHard100 as the "primer coat" to a maximum coverage area per kit between 350 - 400 sq.ft. Application can be performed with a 3/8" lint-free roller or an epoxy application squeegee pressed tightly to the floor for optimal penetration.

After 16-18 hours or before 24 hours have passed, a second coat can be applied at an average of about 150 sq.ft. per kit (10 - 12 mils) using a roller or squeegee/backroll combination. If walking on the floor before it has dried completely, spiked shoes should be worn while walking on the surface.

### Application Notes:

- When applying to adjacent sections of floor, overlap the previously applied coating by about 6" to blend uniformly.
- Where possible, use natural break points in the floor (such as expansion joints) to dictate where new sections are started and stopped, especially if applications will be continued the following day.
- When performing back rolling, change to a fresh roller periodically for uniform application as epoxy nearing end of pot life begins to set up on the roller. Mount the roller on the frame in the same direction every time it is changed.
- The coated floor will be ready for normal use (foot traffic) in 24 hours at 70-80°F and 50% relative humidity. **DRIVEABLE IN 48 - 72 HOURS.** Do not wash with chemical cleaners for 5 days after application.
- Where a slip-resistant floor treatment is desired, apply one coat of DaiHard100 at approximately 6 - 8 mils thickness (125 sq.ft. per kit). As you go, broadcast a light and uniform layer of **DAICH Non-Slip Additive** into the wet epoxy to create light surface texture. After 6-8 hours or before 24 hours have passed, apply a second coat at the same thickness over the surface to lock down the additive and complete the floor finish.

### Maintenance:

For general purpose cleaning, use **DAICH X-Mess Multi-Purpose Cleaner** or other suitable cleaner. Scrub the surface with a stiff-bristled brush or broom. Rinse with water and let dry. Occasional touch ups may be required in heavier duty usage areas.

### DANGER: MAY CAUSE SEVERE SKIN BURNS AND EYE DAMAGE

(NOT HAZARDOUS UNDER NORMAL USE)

**AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WEAR EYE AND SKIN PROTECTION DURING USE.** Wear protective gloves: > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Wash hands thoroughly after handling. Collect spillage. **KEEP OUT OF REACH OF CHILDREN.** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. DO NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.