

DURA-RUBBER™

PRODUCT DATA SHEET (Underwater Applications)



DESCRIPTION

DURA-RUBBER™ is water-based waterproof rubber coating that is water immiscible, high solids, single-component, pigmented rubber coating for the protection and enhancement of aquatic environments and water features. Formulated to withstand harsh underwater conditions while offering excellent adhesion to concrete, shotcrete, and fiberglass. **DURA-RUBBER** imparts a tough, flexible and waterproof finish to pools, spas, water parks, marina structures, ponds, fountains and other concrete water elements.

BENEFITS

- Indoor or outdoor application
- Exceptional impact, abrasion and chemical resistance
- **Safe for Marine life**
- 100 Standard colors and custom color matching available
- Low VOC and meets all California VOC standards.
- Smooth and slip resistant options

SURFACE PREP

The principles for surface preparation for **Dura-Rubber** on approved concrete substrates,

IMPORTANT!

» Before using **Dura-Rubber**, testing for vapor transmission is required «

Plastic sheet test (ASTM-D-4263) can often identify excessive moisture vapor transmission. Tape all 4 sides of an 18" (45 cm) square of clear plastic to the slab and leave in place for 16 hours. Any condensation formed or darkening of the slab beneath the plastic indicates the surface is too wet for **Dura-Rubber**.

Calcium Chloride test (ASTM-F-1869) will quantify the amount of moisture that is transmitted to surface of the slab. The moisture measurement is expressed in terms of pounds (kg) per 1,000 ft² (m²) per 24 hours. Measurements that are in excess of 3 pounds per 1,000 ft² (1.4 kg per 100 m²) over 24 hours are too wet for **Dura-Rubber**. Follow directions of test kit manufacturer.

PACKAGING

- 1 Gallon Pails
- 5 Gallon Drums
- 55 Gallon Barrels
- 275 Gallon Totes

COLORS

100+ Standard Colors; custom available

COVERAGE

Varies upon substrate: approximately 40 - 50 ft² per gal. mils dry

SHELF LIFE

6 months in a un-opened container
Keep dry and moisture free
Do not let freeze



Wood - Metal - Concrete - EPDM - & More

- 1. Cured:** Any concrete must be sufficiently cured to have complete hydration, approximately 28 days depending on temperatures & humidity.
- 2. Sound:** **Dura-Rubber** should not be placed on flaking concrete, spalling concrete. Surfaces exhibiting delamination, divots, spalls or any other surface anomalies, should be addressed by diamond grinding, shot blasting, or other mechanical methods leaving the surface properly profiled (see #3 below). Depending upon size of area, patching may be required prior to application of **Dura-Rubber™**.
- 3. Profiled:** For a proper bond, the surface of concrete must be prepared in accordance with the standards established by the International Concrete Repair Institute (ICRI) Technical Guideline no. 03732 for Concrete Surface Profile (CSP). The established profile is categorized as CSP-1 through CSP-3. Customarily cement-based overlays do not require profiling.
- 4. Clean:** After surface profiling is complete and prior to application of **Dura-Rubber** the surface must be free of any contaminants that serve as a bond breaker or prevent proper adhesion. This includes but is not limited to; dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter.

5. Limit Moisture: Since *Dura-Rubber* is not vapor permeable and due to the uncertainty of vapor barriers placed beneath concrete, testing prior to application is appropriate.

- a. **Plastic sheet test** (ASTM-D-4263) can often identify excessive moisture vapor transmission. Tape all 4 sides of an 18" (45 cm) square of clear plastic to the slab and leave in place for 16 hours. Any condensation formed or darkening of the slab beneath the plastic indicates the surface is too wet for polyurethane.
- b. **Calcium Chloride test** (ASTM-F-1869) will quantify the amount of moisture that is transmitted to surface of the slab. The moisture measurement is expressed in terms of pounds (kg) per 1,000 ft² (m²) per 24 hours. Measurements that are in excess of 3 pounds per 1,000 ft² (1.4 kg per 100 m²) over 24 hours are too wet for polyurethane. Follow directions of test kit manufacturer.

6. PH Level: Do not apply *Dura-Rubber* when PH readings reading are above 10.5, typically this is found on freshly placed concrete before a cure of 28 days.

Curing" or "Vulcanization" Times

You will notice the product is dry to the touch with-in a few hours, and will be waterproof. However, the rubber is still going through a very important process called "Vulcanization" - this is the process where the rubber becomes one single membrane and can contain water on a continuous basis. The process of "Vulcanization" takes 7 days. You do not want to expose coating to chemicals or continuous water saturation until the vulcanization process is complete.

DISPOSAL

Contact your local government household hazardous waste coordinator for information on disposal of unused product. Upon curing, left over catalyzed product is not hazardous.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/ seller's option. Rubberizeit shall not be liable for cost of labor or direct and/or incidental consequential damages.

CAUTIONS

KEEP OUT OF REACH OF CHILDREN. Although *Dura-Rubber* is non-toxic and low voc it is recommended to when prolonged breathing of vapors. Use NIOSH approved mask for organic vapors if threshold limit values are unsafe. Skin Contact: Skin contact may cause irritation.

Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. Eyes: Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

FIRST COAT

For a 20mil coat, it will take one gallon to get 20mil dry (40sfper gallon). The *Dura-Rubber* is 61% solids , so if you apply 3ea 10mil coats, you will get 20mil dry. The easiest way to do it. If you purchased 4 fives, that is enough to cover 800sf at 20mil, so if your pond has 800sf apply until it is gone. **10mil coats would be the maximum per coat** you can apply without cracking due to the water in the product escaping during drying. To give you an idea, latex paint for walls goes on at about 1-2 mill per coat about as thick as copy paper. The thickness required will vary depending on the application. If you are using a tinted product it is recommended you use black or white for your base coats and top coat with the color coat.

Needs to "deep" dry between application coats. This means that because *Dura-Rubber* is water-based, all water must evaporate out of each application coat prior to the next application coat. Otherwise, the rubber will develop small bubbles of fluid between the coats. If you have small bubbles appearing on your project, you need to wait longer between your application coats. Time to dry between applications coats is approximately 3-8 hours - depending on temperature and relative humidity

SECOND COAT & AND TOP COAT

Surface Preparation for additional or subsequent coats or topcoat: Optimal window of time to apply subsequent coats, or the top coat, is within 12- 48 hours. This will allow for a chemical bond. Apply additional coats at the rate of no more than 10 wet mils per coat

SUITABILITY SAMPLE

Because job site conditions and requirements can vary significantly, always prepare a sample on site. The sample should determine the adhesion to the concrete you can test one of two ways.

1. Apply a 12x12 thin coat. Let dry for 24 hours minimum With a utility knife cut an X in the coating. Firmly stick some duct tape to the coating and pull the tape off. If it dees not remove the coating you are good to apply. We recommend you do this in a few areas.

2. Cut a 6" long piece of reinforcement fabric and using the *Dura-Rubber* glue one end the the concrete making a flap. Let dry for a minimum of 24 hours the longer the stronger it we be. Pull on the tab to test adhesion.

CLEAN-UP

Before *Dura-Rubber* dries; spills and tools can be cleaned up with a soap and water. If it dries you will most likly have to dispose of the tool.