

Page 1/4

### **AQUASMART®-DUR**

# Two-component, low viscosity, water based, 1:1 by volume, epoxy coating / primer.

#### **DESCRIPTION**

**AQUASMART®-DUR** is a revolutionary epoxy based primer/coating formulated by Alchimica research and development laboratory. It is a twocomponent, water based, epoxy coating, specially formulated for use in a 1:1 by volume ratio. This allows the user to consume even the smallest quantities and store the material for future needs. The viscosity of the material is low and the pot life long, making it ideal for DIY applications. AQUASMART®-DUR can be easily colored with universal pigment pastes available in hardware stores and can be filled with equal parts of quartz sand giving rise to an excellent protective coating for concrete and metal surfaces. The material displays very low levels of yellowing upon prolonged exposure to UV.

#### RECOMMENDED FOR

- Primer for AQUASMART® range of polyurethane dispersion products as well as Hyperdesmo® and Epoxy range.
- Primer when humidity barrier properties are required
- sealing coat for concrete,
- adhesive layer between old and new concrete,
- · Anti-Dust Floor coating
- Protective coating for old metal based structures

#### FEATURES & BENEFITS

- 1:1 By volume application ratio
- Quick curing even at lower temperatures
- Low-odor, safe and non-flammable (zero VOC).
- Suitable for application in closed spaces.
- Easy clean-up.

- Strong adhesion even on damp or green concrete. Also on iron, galvanized steel, aluminium, glass and wood.
- Good mechanical properties and abrasion resistance.
- · Easy coloring with water based pigment paste
- Visible pot-life

#### **APPLICATION PROCEDURE**

#### Mixing:

Mix the two components well manually or using a low speed (300 rpm) mixer.

#### **Application:**

• As primer -

Application in thin coats only. Apply with roller in one or two coats with total maximum consumption of 150 gr/m<sup>2</sup>.

Recoat time cannot be determined in terms of hours since it is highly dependent on weather conditions: It can be as low as 2 hours during summer and as high as 24 hours during winter. Use the following rule of thumb to determine when recoating should take place. Recoat (with AQUASMART®-DUR or HYPERDESMO®) when material has hardened to the degree where it can no longer be punctured by finger nail.



- Do not exceed the stated consumption numbers as this will affect adversely its adhesion and durability.
- Pot life of mixture is 1 hour maximum at 25 °C.
- Hot concrete should be wetted before application.









Page 2/4

### **AQUASMART®-DUR**

#### CONSUMPTION

 As primer – Apply in one or two thin coats with total consumption of 150 gr/m<sup>2</sup>.

#### CLEANING

Clean tools and equipment first with paper and then using SOLVENT-01. Under no circumstances should they be re-used to mix/apply polyurethane products.

#### **PACKAGING**

Component A: 1 Lit, 4 Lit Component B: 1 Lit, 4 Lit

#### SAFETY INFORMATION

AQUASMART-DUR is free of solvents. Nevertheless, you are advised to observe the standard safety rules: Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. The M.S.D.S. (Material Safety Data Sheet) is available on request.

#### TECHNICAL SPECIFICATIONS

#### In liquid form (before application, after mixing):

Component A – milky white Component B – yellow

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield) of mixed product	сР	ASTM D2196-86, @ 25 ℃	100
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 ℃	1.0
Mixing ratio	A:B, by volume	-	1:1
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	3-5
Full cure	days	-	3
Recoat time	-	-	When material has hardened to the degree where it can no longer be punctured by finger nail
Pot life	hours	-	1 @ 25 °C









Page 3/4

## AQUASMART®-DUR

#### In cured form (after application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	10-40
Adhesion to concrete	kg/cm² (N/mm²)	ASTM D4541	> 30 (> 3)
Resistance to friction	Gr	ASTM D4541 (Taber 503, CS17, 1.0 kg, 1,000 revs.)	120 * 10 <sup>-3</sup>





Page 4/4

### **AQUASMART®-DUR**

NONE OF OUR PUBLISHED INSTRUCTIONS AND SPECIFICATIONS, IN WRITING OR OTHERWISE, ARE BINDING EITHER IN GENERAL OR WITH RESPECT TO ANY THIRD PARTY RIGHTS, OR DO THEY RELIEVE INTERESTED PARTIES OF THEIR DUTY TO SUBJECT THE PRODUCT TO AN ADEQUATE EXAMINATION OF ITS SUITABILITY. IN NO EVENT WILL ALCHIMICA S.A. BE RESPONSIBLE FOR DAMAGES OF ANY NATURE, WHATSOEVER, RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.



