

# EPOSHIELD DC100

## High Performance Protective Polyaspartic Coating

### Description:

EPOSHIELD DC100 is a high performance elastomeric two component, liquid applied aliphatic polyaspartic resin for high scratch resistance and durability features. Once cured it forms, high dense, seamless, monolithic layer with excellent adhesion to most substrates. It is formulated to provide high mechanical and chemical protection for the substrate.

EPOSHIELD DC100 adheres perfectly to a variety of supports like: concrete, metal, wood, stoneware, EPS Boards, epoxy, PU coating, etc.

### Applications:

EPOSHIELD DC100 used as a high build coating for:

- Protection of artificial and architectural designed elements.
- Protection of ESP Pantone marine decks.
- Waterproofing for all water features including fountain, pools, artificial lakes, wet areas, etc.
- As top coating for epoxy/PU coatings for UV exposed areas.

### Advantages:

- Solvent free coating 100% solid content.
- Excellent mechanical and abrasion resistant.
- UV resistant stable color.
- Durable and low maintenance cost.
- Excellent resistance to a range of chemicals.
- Excellent adhesion to substrate.
- Ease of application.

### Instructions for Use:

#### Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. In case of application on concrete ensure that concrete is fully cured. Prepare concrete surface utilizing mechanical

preparation method: grinding, captive blasting and sand blasting. If the substrate is restricted to access, utilize preparation by handy mechanical tools.

Perform repairs to cracks, levelling of uneven areas; fill voids by means of epoxy based repair products, consults MATEX Technical Department for further advice.

For applications on metal surfaces, surface should be thoroughly cleaned by Sand blasting or mechanical wire brush to remove rust, corrosion or any other contamination. After cleaning, epoxy primer ARMOPRIME EP100 must be applied directly to metallic surfaces to prevent further oxidization of surface.

#### Mixing:

Mix the contents of both components separately with a low speed mixer for two minutes to homogenize the contents of the containers. Then slowly add the contents of part B (Hardener) to Part A container and Mix thoroughly the materials with low speed mixer (200-300 RPM) for an interval of 3-4 minutes confirming a homogenous, color consistent, lump free mixture is reached.

#### Application:

After mixing, allow the product to rest for 3-5 minutes to release entrapped air, EPOSHIELD DC100 can be applied by brush, roller or spray machine. Apply the first coat with minimum thickness of 100 microns WFT (wet film thickness). Applied thickness can reach up to 250 microns WFT per coat.

Apply subsequent coats of EPOSHIELD DC100 within a time frame of 24 hours. Allow 7 days curing before usage to ensure proper curing of the materials.

#### Standards:

EPOSHIELD DC100 conforms to:

- ASTM D2240, ASTM D412, ASTM D624

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## Packaging:

EPOSHIELD DC100 is available in 4 and 15 liter set of two parts metallic containers.

TECHNICAL PROPERTIES	
Color	: Clear, (colors upon request)
Density	: 1.05 Kg. / Lt.
Tensile strength	: 30.0 N / mm <sup>2</sup>
Flexural Strength	: 36.0 N / mm <sup>2</sup>
Elongation	: 8%
Solid Content	: >95 %
Bond strength to concrete	: >2.0 N / mm <sup>2</sup>
Viscosity at 25°C	: 1400 MPa.S
Pot-life time at 25°C	: 45 minutes
Heat resistance	: +5°C to +90°C

CHEMICAL RESISTANCE		
Material	Concentration	Resistance
Lactic Acid	10%	Excellent
Citric Acid	10%	Excellent
Hydrochloric Acid	25%	Excellent
Sodium Hydroxide	40%	Excellent
Acetic Acid	10%	Excellent
Butanol	-	Excellent
Crude Oil	-	Excellent
Nitric Acid	20%	Excellent
Sulphuric Acid	40%	Excellent
Mineral Oil	10%	Excellent
Ammonia	10%	Excellent
Sea Water/Jet Fuel		Excellent

## Storage:

Store in original packing in dry conditions away from direct sunlight and in a temperature controlled warehouse.

## Coverage:

EPOSHIELD DC100 achieves coverage of 5.0 square meters per liter @ 200 micron DFT per coat.

## Shelf Life:

EPOSHIELD DC100 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

## Cleaning:

All tools and equipment should be cleaned immediately after use with MATEX ARMOSOLVENT.

## Health and Safety:

- Use goggles and gloves during application. Do not breathe vapor of products. Use only in well ventilated areas.
- Avoid contact with eyes or skin.
- Avoid direct contact with flames and fire.

MATEX Rev02-0223

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