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American Polywater® Corporation

Dura-Plate 100 Epoxy Mortar

TECHNICAL DATA SHEET

Description:

Dura-Plate 100 Epoxy Mortar provides concrete and masonry surfaces with increased chemical and abrasion resistance. The three-part, resin aggregate system forms a trowelable epoxy mortar that applies easily to overhead and vertical concrete surfaces.

When cured, Dura-Plate 100 Epoxy Mortar forms a high strength protective coating for sanitary sewer lift stations, manholes, and other structures. It is impermeable to water, and resistant to attack by hydrogen sulfide and acid generated by microbiological sources.

Product Benefits:

- Easy application requires no primer
- Nonsagging mortar for vertical and overhead application
- Excellent concrete adhesion, both at application, and after curing
- Provides waterproof barrier
- Excellent resistance to hydrogen sulfide and sulfuric acid
- 100% solid, no VOC

Packaging:

5 gallon pail kit containing

- Resin Part A: 1 gallon can
- Hardener Part B: 1 gallon can
- Filler Part C: 20 lb.
- Sika Color Pack

Coverage:

The 5 gallon pail kit covers 25 ft² at 1/8" thickness.

Technical Data:

Dura-Plate 100 Epoxy Mortar cures to form a solid, durable seal.

Property	Value
Pot Life	2 hr. @ 70°F
Peak Exotherm @ 70º F	< 100º F
Cure time @ 70º F	
Initial set	4 hrs.
90% strength	7 days
Final strength	14 days
Maximum Service Temperature	165°F
Minimum Application Temperature	45°F
Compressive Strength	10,000 psi
Flexural Strength	5,800 psi

Chemical Resistance:

Dura-Plate 100 Epoxy Mortar was tested for chemical resistance by immersing cured samples in 20% sulfuric acid at 70ºF for 4 years

Chemical	Value
20% sulfuric acid 4 years immersion	Resistant*

*No changes in mass or appearance of test specimen after immersion

Component Physical Properties:

Dura-Plate 100 Epoxy Mortar is a 3-part thixotropic system packaged in a pail kit with a Sika Color Pack.

Property	Resin Part A	Hardener Part B
Color	White	Tan
Form	Paste 100,000 cps	Liquid 20,000 cps
Odor	No Odor	Slight ammonia
Specific Gravity (water = 1)	1.2	1.05

Part C is a specially formulated silica filler.

Safety:

Dura-Plate 100 Epoxy Mortar has a low level of toxicity. Good industrial hygiene practice and appropriate precautions should be employed during use. Avoid personal contact with the product. See MSDS for specific details.

Storage and Handling:

Keep cans tightly closed in a cool, dark, dry location. All cans should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Unopened product has a shelf life of two years.

Application:

Surface Preparation: Surfaces should be clean, structurally sound, and fully cured for 28 days. Remove any loose material. Be sure that surfaces are free of oil, grease, paint, rust, asphalt, and other contaminants. Surfaces may be cleaned with detergents followed by thorough rinsing with water. Best results are seen when new concrete is abraded by abrasive blast, high-pressure water blast, or acid etch to obtain uniform surface texture. Dura-Plate 100 Epoxy Mortar may be applied to clean surfaces that are dry or are slightly damp.

Mixing: Dura-Plate 100 Epoxy Mortar is packaged in factory pre-measured kits. To mix, pour the Resin Part A and the Hardener Part B into a clean pail. Mix thoroughly until a consistent color is seen. Slowly add in Filler Part C, continuing to mix until the consistency is uniform. Mix only complete batches. Add the light gray Sika color pack slowly till it is thoroughly mixed and uniform color is seen. Do not add solvents to Dura-Plate 100 Epoxy Mortar.

Installation: Apply 1/8” (3 mm) in thickness with a trowel or spatula. Apply Dura-Plate 100 Epoxy Mortar at ambient temperatures of 45°F (7°C) and above. Do not apply once the material has begun to set up. Pot life and cure time of Dura-Plate 100 are dependent on temperature. Higher temperatures shorten these times. Lower temperatures lengthen these times.

Clean Up: Clean uncured material from equipment with Grime-Away™ Multi-Purpose Cleaning Wipes or Type HP™ Cleaner. Remove cured material mechanically. Clean hands with soap and water or Grime-Away™ Multi-Purpose Cleaning Wipes.

Makers of Polywater® and Dyna-Blue® Cable Lubricants and Pull-Planner™ Software

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