



PRODUCT DATA SHEET

1110-PW

High Performance Lining

GENERAL DESCRIPTION

DUROMAR HPL-1110-PW is an easy to apply, 100% Solids, Zero VOC epoxy lining system. It is designed for use in drinking water applications requiring certification to NSF/ANSI/CAN 61/600 as well as compliance with AWWA C210. This immersion grade lining system may be used on both concrete and steel surfaces. It is resistant to cracking from expansion and contraction and can be applied to damp surfaces.

CHEMICAL DESCRIPTION

Multifunctional Phenalkamine epoxy.

FEATURES

- 100% Solids, Zero VOC
- Excellent Long-term Immersion Performance
- Meets AWWA C210 Requirements
- Certified surface area to volume rate of 393.7 cm²/L @ 23°C.
- Certified to NSF/ANSI/CAN 61/600 for piping systems ≥4" @ 23°C
- Certified to NSF/ANSI/CAN 61/600 for storage tanks 500 Gallons and larger @ 23°C

Typical Properties

Components	2
Visual Appearance	High Gloss
Density	1.37
Solids by Weight	100%

Chemical Resistance Data @ 70°F

pH Range	3.0-12
Acids	Very Good
Alkalis	Excellent
Hydrocarbons	Very Good
Solvents	Fair
Potable Water (23°C)	Excellent

Typical Physical Properties

Max. Dry Operating Temp	220°F
Functional Cure	36 hrs.
Full Cure	60 hrs.
Repair System	GMC-PW
Surface Prep (Metallic)	SSPC-SP 10
Recommended Anchor Profile (Steel)	3-5 mils
Surface Prep (Concrete)	SSPC-SP 13
Adhesion	Excellent
Flexibility	Good



Drinking Water System Component
NSF/ANSI/CAN 61
ALSO CERTIFIED TO
NSF/ANSI/CAN 600
MH10191

Application Information

Pot Life @ 70°F	40 min.
Equipment	Brush, Roller, Airless Spray
Number of Coats	1-3
Theoretical Coverage	40 ft ² /gal/40 mils
Film Thickness/Coat	10 mils min. 25 mils max.
Min. Recommended System DFT	10 Mils
Max. Recommended System DFT	125 Mils
Recoat Time @ 70°F	4 hr. min. 120 hr. max.
Min. Application Temp.	35 °F
Mixing Ratio by Weight	2.8:1 (B/A)
Mixing Ratio by Volume	2.0:1 (B/A)
Dry to Touch	6 hrs.

FORCE CURING

Force cures can be used to accelerate the cure or to enhance both physical and chemical properties. Force curing should not start until material has firmly set. Contact **DUROMAR** for specific instructions.



Registered to ISO 9001

General Application Guidelines

HPL-1110-PW

Always read and understand the specific product Data and SDS sheets and the **DUROMAR Information and Application Guide** before using these High Performance Lining Products. For more information contact **DUROMAR** at 781-826-2525 or by email at info@duromar.com.

I. STORAGE:

Store all product in a clean, warm area where the temperature remains between 50-110°F (10-43°C). Cold products are very viscous and will be difficult to mix and apply.

Products shipped during cold months can remain cold for many days even when stored as recommended. Paste or trowel applied products will remain cold longer than liquid or spray applied products. Heating of the individual components may be required to bring the products to the recommended temperatures.

II. SURFACE PREPARATION : SSPC-SP 10 / SSPC -SP13

All surfaces to be lined are to be clean, dry, and oil free. Refer to the **DUROMAR Information and Application Guide** for specific instructions for various surfaces such as concrete, metal fiberglass, etc.

Minimum surface temperature during application - refer to Product Data Sheet.

For Brush, Roller, or Spray Applied Products, the surface profile must be 3 mils minimum.

III. APPLICATION EQUIPMENT:

Brushes - short bristle, nylon, and non-shedding. Replace when products become hot or stiff.

Rollers - short nap (3/8" max.) non-shedding, with a polyethylene core. Replace when products become hot or stiff.

Airless Spray Equipment – Single, Plural recommendations are listed in the **DUROMAR Information and Application Guide**.

IV. MIXING:

Do not add solvent to any DUROMAR product. These 100% solids materials are formulated to be applied as shipped after proper mixing.

The temperature of the Hardener (A) and Base (B) portions should be between 70-80°F (20-25°C). Mix them separately to insure a uniform consistency.

Add the entire contents of the Hardener (A) to the Base (B) bucket. Use a brush or squeegee to assist in the transfer. These portions are accurately measured and best product performance will be obtained if all the Hardener and Base is combined. Pouring from one container to the other (boxing) during mixing is very helpful in insuring complete mixing.

Mix the products until no streaking is observed and then for about one (1) minute longer.

V. APPLICATION:

For hand application, immediately break down the full unit into smaller portions such as roller pans, small buckets, or trowel boards. This will keep the product cooler and improve the useable life.

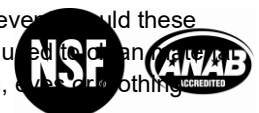
For spray application using a single or plural component airless system, see Section 4 in the **DUROMAR Information and Application Guide**. Make sure all components are working according to the airless equipment manufacturers' instructions and the product components are at the recommended temperature before spraying.

VI. OVERCOATING:

When applying multiple coats of any epoxy products, always check for Amine Blush before applying the next coat. Amine Blush may occur when the epoxy surface is cool or in humid environments. It has the appearance and feel of a light oil film on the surface. When dry it has a white chalky appearance. If detected, wash the surface with a 2% hydrochloric acid solution followed by a water wash until the surface pH is between 6-8. Allow to dry before applying the next coat.

VII. CLEAN UP

Most solvents and commonly used thinners such as MEK, acetone, xylene, 1,1,1 trichloroethane, and safety solvents such as Ensolv, etc., can be used for cleaning tools and equipment. However, as many of these materials are flammable or present other safety hazards, the user should read the MSDS for these materials before using. In no event should these materials be used to clean your face or from the skin, or for anything other than cleaning.



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