

Technical Data Sheet

Product Name: HighLine 310

Technical Data

Mix Ratio, By Volume: 1A:1B
Pot Life: 2-5 seconds
Tack Free Time: 10-30 seconds
Recoat Time: 0-12 hours
Viscosity at 150-160°F (65.5-71°C), Brookfield:
 Side A: 120 ± 20 cps
 Side B: 190 ± 20 cps
Density (Sides A & B combined): 9.17 lbs/gal
Specific Gravity (Sides A & B Combined): 1.10
Flash Point: >200°F (93°C)
Hardness, ASTM D-2240: 55 ± 5 Shore D
Tensile, ASTM 412-C: 2700 ± 300 psi
Elongation, ASTM 412-C: 200 ± 20%
Tear, ASTM 624-C: 400 ± 40 pli
Service Temperature: -20-250°F (-20-121°C)

Adhesion Results: ASTM D-4541

Substrate/Primer	PSI	Result
Concrete (WC-111 Primer)	>1500	Concrete Failed
Plywood (WC-111 Primer)	>350	Plywood Failed
OSB (WC-111 Primer)	>150	OSB Failed
Steel (Primer 41)	>1900	Primer Failed
Aluminum (Primer 41)	>1200	Adhesive Failed

Description

ArmorThane HighLine 310 is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass, and wood surfaces.

Its features are:

- ◆ Seamless
- ◆ Tough and elastomeric
- ◆ Chemical resistant
- ◆ Low temperature flexibility
- ◆ Abrasion and impact resistant
- ◆ High build
- ◆ Quick drying

Of course, HighLine 310 can be used for truck bed surfaces, but some of the other typical uses are:

- Utility vehicles
- Boat linings
- Industrial flooring
- Containment areas
- Encapsulation polystyrene foams
- Cargo liners & holds
- Waterproof decking
- Walkways
- Horse Trailers

Agitation

HighLine 310 Side B resin is made up of many components. As a result, prior to using the resin, it must be agitated so that all of the components mix thoroughly together. The rule of thumb for agitation is:

Agitate for one minute for every 1 US gallon of resin, or until mixed thoroughly.

DO NOT OVERAGITATE. If resin is agitated for excessive periods, catalyst levels may be reduced through exposure to air. Therefore, only agitate enough to thoroughly mix the resin. Components within the resin will begin to settle after approximately 6 hours. Therefore, resin will need to be agitated every day it will be used.

HighLine 310 Side A ISO requires no agitation.

Pigmentation

HighLine 310 Side B Resin requires that 100 grams of ArmorThane pigment be added to every one US gallon.

Application

HighLine 310 is spray applied, using the ArmorThane HighLine 2511 or 4011 plural component spray system.

Both HighLine 310 Side A and HighLine 310 Side B materials should be preconditioned at 75-80°F (24-27°C) before application.

ArmorThane HighLine 310 materials should be sprayed at temperatures above 150°F (66°C). Adequate pressure and temperature should be maintained at all times. HighLine 310 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

Surface Preparation

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion, and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface

preparation. ArmorThane recognizes the potential for unique substrates from one project to another.

Refer to the technical bulletins in the ArmorThane Operations Manual concerning the preparation method for the substrate

Storage and Handling

ArmorThane HighLine 310 has a shelf life of six months from date of manufacture in original, factory sealed containers.

Avoid exposure to freezing temperatures for an extended period of time. Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate drums (both Side A and Side B) regularly. Do not open drums until ready to use.

Packaging

- ◆ 104 gallon drum kit: 52 gallons per drum Side A and 52 gallons per drum Side B

Limitations

Due to its aromatic composition, ArmorThane HighLine 310 will tend to yellow or darken in color after exposure to UV light. HighLine 310 may be topcoated with ArmorThane UV Topcoat or UV ColorCoat for a color-fast glossy finish.

Both Side A and Side B drums must be fitted with a desiccant device during use.

THIS PRODUCT CONTAINS ISOCYANATE AND CURATIVE MATERIAL

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