

Technical
Data Sheet



The Willamette Valley
Company, LLC
www.wilvaco.com
800.333.9826

Partnering through service,
innovation, and integrity

FastPatch HPRC

High Performance Rail Coating

DESCRIPTION

FastPatch HPRC is a two-component, 100% solids, 0 VOC spray coating designed for easy and versatile application. Use HPRC to prevent corrosion, provide electrical isolation, and keep water out with its extremely low water and water vapor permeability. FastPatch HPRC demonstrates excellent resistance to abrasion and adhesion to steel and concrete.

WHERE TO USE

- Waterproofing
- Protective Coating for Rail
- Primary and Secondary Containment
- Steel and Concrete
- Bridge Decks

FEATURES AND BENEFITS

- 100% Solids, no VOC, Environmentally Friendly
- Very Low Moisture Vapor Transmission (MVT)
- Meets AREMA Ch. 8: 29.9.10 Waterproofing Requirements
- Superior Chemical Resistance
- Apply with Low or High Pressure Systems

PACKAGING

Totes, 250-gallon (946 L)
Drums, 50-gallon (189 L)
Pails, 5-gallon (19 L)
Cartridge, 0.40-gallon (1.5 L)

COLOR

Black

SHELF LIFE

1 year when properly stored.

STORAGE

Store and ship this product in clean, dry, low-humidity, and shaded or covered environments between 50 and 90°F (10-32°C)

TYPICAL PROPERTIES*

Gel Time , seconds (can be adjusted)	10
Tack-free Time , seconds (can be adjusted)	35
VOC , lbs/gal (g/L), ASTM D2369	0
Abrasion Resistance , mg lost, H-18 wheels, 1 kg, 1,000 cycles, ASTM D 4060	195
Hardness , Shore D, ASTM D 2240	40-45
Viscosity , cps, ASTM D 4878, resin / iso	750/650
Tensile Strength , psi (MPa), ASTM D412	1,700 (11.7)
Elongation at Break , %, ASTM D 412	125
Tear Strength , pli (kN/m), ASTM D 624 Die C	180 (31.6)
Adhesion to Concrete , psi (MPa), ASTM D 4541, unprimed	≥350 (2.4), 100% substrate failure
Adhesion to Steel , psi (MPa), ASTM D 4541, unprimed	≥1,000 (6.9) 100% glue failure
Puncture Resistance , lbs (kg), ASTM D 4833	100 (45)
US Permeability , (permeance * thickness (inches)), ASTM E96 water/desiccant	0.023 / 0.0165
US Permeance , (grain/(hour*ft ² *in Hg)), ASTM E96 water/desiccant	0.29 / 0.21

*typical properties measured for application with high-pressure spray system, see recommendations for application parameters and installation

APPLICATION PARAMETERS

Ratio by Volume	1:1
Recommendations for High Pressure Spray System	
Application Equipment	High Pressure, Heated, Plural Component Meter
Gun	Impingement mix
Pressure, psi (MPa)	2,000 to 3,000 (13 to 21)
Spray Temperature, °F (°C)	140 to 160 (60 to 71)
Recommendations for Low Pressure Spray	
Equipment	Pre-Tec Portable Low Pressure System
Air Supply	17 CFM @ 100 psi, low moisture
Recommendations for Cartridge Spray	
Application Equipment	SULZER MixCoat™ 1500 series
Air Supply	12 CFM @ 100 psi, low moisture

INSTALLATION RECOMMENDATIONS

Safety

Before handling, you should become familiar with the Safety Data Sheet (SDS) regarding the risks and safe use of this product. To obtain an SDS, please call 800-333-9826 or send an email to: msds@wilvaco.com. **Appropriate PPE must be worn at all times when working with and/or applying HPRC.**

Material handling

HPRC resin and iso needs to be stored in a clean, dry, low-humidity, and shaded or covered environments between 50 and 90°F (10-32°C).

For best results, material should be conditioned at 70° F (21° C) before installation.

Do not let HPRC material drop below 50°F (10°C).

HPRC resin component needs to be thoroughly mixed before using.

Concrete substrate

In order to maximize adhesion, priming is recommended. Use POLYQuik® PolyPrime or other suitable primer. Contact WVCO representative for primer options, technical recommendations.

Adhesion to concrete is typically limited by the tensile strength of the substrate. In order to achieve good adhesion, the concrete should be clean (ASTM D 4258), and dry (less than 5% surface moisture, ASTM E 1907 and D4263) and have sufficient tensile strength to achieve the desired adhesion strength.

TDS measurements were made on high quality (5,000 psi) ≥28 day cured concrete paving blocks. Surface was prepared by abrasive blasting.

Steel substrate

In order to maximize adhesion, priming is recommended. Use POLYQuik® PolyPrime or other suitable primer. Contact WVCO representative for primer options, technical recommendations.

Adhesion to steel is typically limited by the quality of the surface: profile and cleanliness. In order to achieve good adhesion the surface should be cleaned by abrasion.

Adhesion will be negatively impacted or prevented if the steel has any surface contamination that cannot be effectively removed.

TDS measurements were made on cold rolled steel blasted to SSPC-SP10 / NACE No. 2 Near White standard (0.003" (0.08 mm) profile).

HEALTH AND SAFETY

Before handling, you should become familiar with the Safety Data Sheet (SDS) regarding the risks and safe use of this product. To obtain an SDS, please call 800-333-9826 or send an email to: sds@wilvaco.com.

THE WILLAMETTE VALLEY
COMPANY, LLC
www.wilvaco.com
info@wilvaco.com

DIVISIONS

WESTERN DIVISION

990 Owen Loop North
PO Box 2280

Eugene, OR 97402

Tel 541.484.9621

www.POLYQUIK.com

www.SPIKEFAST.com

EASTERN DIVISION

6662 Marbut Road

Lithonia, GA 30058

Tel 888.878.9826

MIDWEST DIVISION

1549 Hwy 2

Two Harbors, MN 55616

Tel 218.834.3922

PRECISION TECHNOLOGIES DIVISION

990 Owen Loop North

Eugene, OR 97402

Tel 541.484.2368

www.pre-tec.com

SOUTHERN DIVISION

100 Dixie Mae Drive

PO Box 4450

Pineville, Louisiana 71361

Tel 318.640.5077

SUBSIDIARIES

ECLECTIC PRODUCTS INC.

Corporate Office

990 Owen Loop North

Eugene, OR 97402

Tel 541.284.4667

www.eclecticproducts.com

IDAHO MILL & GRAIN

445 North 430 West Hwy

PO Box 188

Malad City, Idaho 83252

Tel 208.766.2206

TAPEL WILLAMETTE LTD. S.A.

Av. Estero La Posada 3625

Parque Industrial Coronel

Coronel, Chile

Tel 011.56.41.2.928.100

www.tapel.cl

DISCLAIMER OF WARRANTY

TEST RESULTS ARE TO BE CONSIDERED AS REPRESENTATIVE OF CURRENT PRODUCTION AND SHOULD NOT BE TREATED AS SPECIFICATIONS. WHILE ALL THE INFORMATION PRESENTED IN THIS DOCUMENT IS BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST AVAILABLE DATA ON THESE PRODUCTS, NO GUARANTEE, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE SUITABILITY OF ANY CHEMICAL COMPOUNDS FOR ANY PARTICULAR USE, OR THAT ANY CHEMICAL COMPOUNDS OR USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. EACH USER SHOULD CONDUCT A SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE. PROPER APPLICATION IS THE RESPONSIBILITY OF THE USER. AS WITH ANY PRODUCT THE USE OF THIS PRODUCT IN A GIVEN APPLICATION MUST BE TESTED (INCLUDING BUT NOT LIMITED TO FIELD TESTING) IN ADVANCE BY THE USER TO DETERMINE SUITABILITY. TESTING IS THE REQUIREMENT OF BOTH ENGINEERS AND CONTRACTORS ALIKE. WVCO DOES NOT WARRANT THE APPLICATION UNDER ANY OR ALL CIRCUMSTANCES.



W07-R&D-TDS-0187
Revision Date: DECEMBER 2020