

General Description

HP5430 Waterborne Aliphatic Urethane is a two-component, interior/exterior urethane formulated for excellent gloss retention as well as being abrasion, chemical, and solvent resistant. It is suitable for both horizontal and vertical industrial applications. Low-VOC and 24 hour return to service allows for minimal disruptions to facility operations. Excellent as a non-sacrificial anti-graffiti coating when using commercial graffiti removers.

- Resists most cleaning agents and solvents
- 24 Hour Return-To-Service
- Horizontal and Vertical Applications
- Outstanding UV protection

Usage

Properly prepared steel, iron, non-ferrous metals, concrete, wood and drywall. Typical market segments include medical, hospitality and laboratory environments where additional protection on walls exposed to cleaning solutions is required, industrial flooring applications, commercial structures, tank exteriors, and other areas requiring a high-performance urethane.

Colours Clear (00)

Technical Data

Resin	Aliphatic Urethane
Pigment	NA
Volume Solids (mixed)	53 ± 2%
Spread Rate Per 3.79 L Kit	25.5 – 37.1 sq. m.
(based on mix ratio of 2:1 (A:B))	(275 – 400 Sq. Ft.)
Recommended	Wet: 3.2 – 4.6 mils
Film Thickness	Dry: 1.7 – 2.4 mils

Depending on surface texture and porosity.

Dry Time @ 25 °C (77 °) @ 50% RH To Touch: 2 – 4 hours

Most projects will only require one coat. If needed a second coat may be applied in as soon as 8 hours in ideal conditions. On horizontal surfaces, allow 24 hours prior to applying a second for best results.

Service Times: Light traffic: 24 hours

Moderate to heavy traffic: 72 hours

Recoat after 72 hours: Abrade the surface to ensure proper inter-coat adhesion.

Surface Temperature Min: 10 °C (50 °F)

During Application Max: 37.8 °C (100 °F)

Viscosity 94 ± 4 KU

Flash Point > 110 °C (230 °F)

Sheen / Gloss 5 – 10 @ 60°

Clean Up Warm, soapy water

Thinner Do not thin

Mixed Ratio (by volume) 2 : 1

Induction time @25 °C (77 °F) None

Pot Life @ 25 °C (77 °F) 1 hour

Weight Per Gallon (mixed) 4.1 kg (9.1 lbs.)

Storage Temperature Min: 7.2 °C (45 °F)

Max: 35 °C (95 °F)

VOC (Catalyzed) < 50 g/L

Surface Preparation

Surfaces must be clean, dry and free of all grease, dirt, dust, oil and wax. Clean all surfaces using HP6000 Oil & Grease Emulsifier. Remove all remaining loose paint, rust and mill scale via Hand Tool Cleaning (SSPC-SP 2) or Power Tool cleaning (SSPC-SP 3). Fill holes and cracks and sand smooth. Glossy surfaces must be fully deglossed. Moderate to heavily rusted areas must be thoroughly prepared and active rust should be properly removed.

All masonry surfaces must be allowed to cure a minimum of 30 days before painting. Acid etch or abrasive blast all slick, glazed concrete or concrete with laitance. For acid etching, follow all manufacturer's directions and safety instructions. Rinse thoroughly and allow to dry.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by logging onto Health Canada @

<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/lead/lead-information-package-some-commonly-asked-questions-about-lead-human-health.html>

Primer Systems

Concrete and Masonry: Self-priming

On very porous cement surfaces, a sealer may be necessary to maintain finish clarity. On low-traffic surfaces, apply one coat of Acrylic Sealer HP1270 prior to using HP5430. For high-traffic spaces (vehicular, forklift, etc.) apply one coat of HP4400 Acrylic Epoxy Gloss in clear, prior to using HP5430.

Previously Painted Surfaces: HP5430 can be applied over most finishes in good condition.

Limitations

- Do not apply if air or surface temperatures are below 10 °C (50 °F) or above 37.8 °C (100 °F).
- This product is not intended for immersion service.
- Coated surfaces may discolor under tires due to plasticizer migration.

Compliance & Certifications

Eligible for LEED® v4	✓
CDPH Emissions Certified	✓
Eligible for CHPS low emitting credit (Collaborative for High Performance Schools)	✓
MPI	105, 205, 252

Mixing Instructions

This is a two-component product and is pre-proportioned for error free mixing. Mix "A" & "B" separately.

- 1.) Carefully empty the entire contents of HP5430.90 Part B catalyst into the can of HP5430 Part A component resin. Part A container is short filled to accept entire contents of Part B catalyst.
- 2.) Using a drill mixer at low speed, blend this mixture for three to five minutes until completely incorporated. Keep the mixing blade turning at a slow speed to minimize whipping air into material. Scrape sides of pail during the mixing process.
- 3.) Once completely mixed, use immediately

Pot Life: 1 hour at 25 °C / 77 °F

Component A	Component B	Total Yield
HP5430.00 1.89 L (0.50 gal.)	+ HP5430.90 946 mL (0.25 gal.)	= 2.8 L (0.75 gal.)

Technical Assistance

Available through your local authorized independent Benjamin Moore retailer.

call 1-866-708-9180

visit www.benjaminmoore.ca

Application

Airless Spray: Tip range between .015 and .017. Total fluid output pressure at tip should be between 2000 and 2400 psi.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with water.

Brush: Nylon/polyester

Roller: Phenolic core, 6.35 mm – 9.5 mm nap.

Where non-skid characteristics are desired, hand broadcast an appropriate anti-slip aggregate into the wet film then back-roll to encapsulate. HP6300 works well for opaque finishes although will be noticeable in clear finishes.

Do not mix less than full batch/container quantities.

Do not apply if material, substrate or ambient temperature is below 10 °C (50 °F). Relative humidity should be below 85%. Do not apply if within 5 degrees of dew point or if rain is expected within 12 hours of application.

Clean Up

Wash brushes, rollers, and other painting tools with warm, soapy water immediately after use.

Test Data

TEST DATA	
Flexibility (ASTM D522)	Pass 1/4" Mandrel
Dry Heat Resistance (continuous)	121.1 °C / 250 °F
Wet Heat Resistance	65.6 °C / 150 °F
Pencil Hardness (one week cure)	2H
Abrasion Resistance (ASTM D4060) Taber (CS-17 Wheel, 1000g load, 1000 cycles)	49.5 mg. loss

CHEMICAL RESISTANCE GUIDE (NON-IMMERSION)	
Fresh Water	Excellent
Salt Water	Excellent
Acids	Excellent
Alkalis	Excellent
Solvents	Excellent
Fuel	Good
Acidic Salt Solutions	Excellent
Alkaline Salt Solutions	Excellent
Neutral Salt Solutions	Excellent

Environmental Health & Safety Information

CAUTION: All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

FOR PROFESSIONAL USE ONLY PROTECT FROM FREEZING

Refer to Safety Data Sheet for additional health
and safety information.