8115 CrownPro Aliphatic Polyurethane

Technical Data Sheet (TDS)

PHYSICAL PROPERTIES

VOC	37 g/L
SOLIDS CONTENT	96%
VOLUMETRIC MIX RATIO	1A:2B
COVERAGE RATE	160 -400ft²/gal 4-10 Mils
POTLIFE 1 Gal mass @ 75°F	15 Min
WORKING TIME @ 75°F	10 Min
FOOT TRAFFIC @ 75°F & 50% RH	24 Hours
LIGHT TRAFFIC @ 75°F & 50% RH	2 Days
RECOAT WINDOW @ 75°F	12-24 Hours
FULL CHEMICAL RESISTANCE	7 Days

MECHANICAL PROPERTIES

TENSILE STRENGTH ASTM D412	2,120 p.s.i
ELONGATION ASTM D412	60%
TEAR STRENGTH ASTM D624	150 pli
SHORE A HARDNESS ASTM D2240	75
ABRASION RESISTANCE CS17 Wheel, 1000g Load, 1000 Cycles ASTM D4060	20 mg Loss

CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

8115 CrownPro is a two-component high-solids abrasion, chemical and stain resistant aliphatic polyurethane finish coat. It is available in clear gloss. It cures to an inert, tough, impact, abrasion and chemical resistance finish coat. 8115 CrownPro Aliphatic Polyurethane is used as an upgraded finish coat on Crown Polymers products and systems used in aircraft hangars, industrial kitchens, automotive showrooms and shop floors, commercial laboratories and research facilities, hospital and health care, wine and spirit processing and other facilities subjected to traffic and chemical attack. It is designed for Industrial Use.

TYPICAL USES

- Aircraft Hangars & Maintenance Floors
- Automotive Show Room and Repair Areas
- Commercial Bakeries and Kitchens
- Hospital and Health Care Facility Floors
- Laboratories and Research Floors
- Manufacturing and Warehouse Floors
- School & Universities
- Pharmaceutical Floors
- Architectural Wall Coatings

BENEFITS

- Resists a wide range of organic/inorganic acids, alkalis, amines, salts, and solvents.
- Cures quickly, fast turnaround.
- Durable, impermeable, and seamless.
- Superior mechanical resistance.
- Excellent UV and chemical resistance.
- Low maintenance.

COLORS

Clear Gloss

LIMITATIONS

- Higher temp/humidity will result in shortened working times and faster drying time.
- Use 8303 CrownShield™ Moisture Barrier when MVT exceeds 3 lbs. or 80% RH
- Do not dilute with solvents

SHELF LIFE

1 Year from Date of Manufacture provided unopened

STORAGE

Store in a dry environment at room temperature and out of direct sunlight.

APPLICATION EQUIPMENT

Personal Protective Equipment
Jiffy Mixing Paddle
Drill
18"x 3/8" Nap Shedless Roller Cover
4" Chip Brush
Spike Shoes

SURFACE DIAGNOSTICS

Concrete must be structurally sound and free of all contaminants and bond breakers. Test concrete compressive strength using a Schmidt or Rebound Hammer to ensure substrate has compressive strength of 3500 psi or higher.
Perform a pH test using concrete pH test strips or meter to ensure substrate pH is between 9-12.
Perform Moisture Test using either Calcium Chloride per ASTM F1869 or In-Situ Relative Humidity Probe per ASTM F2170 to ensure substrate has Moisture Vapor Emission Rate of 3 lbs or less and Relative Humidity of 80% or less. See CrownTech Bulletin 6: Moisture Mitigation Negative Side Moisture Barrier

If Moisture Vapor Emission Rate is above 3 lbs. but below 25 lbs. and relative humidity is above 80% but below 99% then apply 8303 Moisture Barrier Primer first at 16 mils with a coverage rate of 100 Ft²/ Gal.

SURFACE PREPARATION

Use Mohs scratch test to determine concrete hardness for proper diamond bond selection.
Concrete should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 per ICRI Guideline no. 310.2R. See CrownTech Bulletin 1: Concrete Surface Preparation.
All perimeter areas of coating termination shall be masked for protection. Saw cut and key-in all termination points.

SURFACE REPAIR

All depressions, divots and cracks should be profiled and free of dust and contaminants. Repair surface imperfections to reduce the ability to see the defect through the coating.
Honor all dynamic (moving) joints, static joints may be filled, use dynamic joints as initiation and termination points during application process where needed.

TEMPERATURE EVALUATION

Ambient and substrate temps should be above 50°F and a minimum of 5°F above Dew Point.
Product temps should be between 70-80°F.
Relative Humidity should not exceed 80%. See CrownTech Bulletin 7: Temperature & Relative Humidity

REFER TO SAFETY DATA SHEETS (SDS) FOR SAFETY PRECAUTIONS.

SAFETY PRECAUTIONS MUST BE FOLLOWED DURING STORAGE, HANDLING AND USE.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

SHALL BE WORN AT ALL TIMES INCLUDING BUT NOT LIMITED TO LONG SLEEVE SHIRTS OR DISPOSIBLE ARM SLEEVES, SAFETY GLASSES, DISPOSIBLE NITRILE GLOVES, AND PROPERLY FITTED NIOSH RESPIRATORS

ALL SOURCES OF IGNITION SHOULD BE TURNED OFF AND ENVIRONMENT SHOULD HAVE PROPER AND ADEQUATE VENTILATION DURING APPLICATION AND CURING PROCESS

MIXING AREA SHOULD BE PLACED ON OR IN CLOSE PROXIMITY TO PROJECT. AREA SHOULD BE SECURELY COVERED WITH PLASTIC, CARDBOARD OR TARP. STAGE MATERIALS , TOOLS AND CLEANING SUPPLIES IN MIXING AREA PRIOR TO APPLICATION PROCESS.

DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED IN 7-10 MINUTES

MIXING PROCEDURE

1. Pre-Mix A-Component in its respective container using Jiffy mixer and drill at low RPMs for 30 seconds to ensure components are fully suspended.
2. Pre-Mix B-Component in its respective container using clean Jiffy mixer and drill at slow speeds for 30 seconds or until thoroughly homogeneous.
3. Transfer A-component and B-component at a mix rate of 2A:1B by volume into a clean 5-gal bucket and mix for 2-3 minutes at low RPMs being sure to scrape sides of the bucket with a stir stick ensuring both components are thoroughly blended

COVERAGE RATE

160-400 Ft² / Gal @ 4-10 mils

WORKING TIME

10 Minutes @ 75°F & 50% RH

WARMER AMBIENT, PRODUCT AND SURFACE TEMPERATURES AS WELL AS HIGHER RELATIVE HUMIDITY WILL SHORTEN POTLIFE AND WORKING TIME.

APPLICATION PROCEDURE

1. Cut-in edges using a 4" chip brush. Do not allow wet edges to stand more than 5 minutes ahead of application of main body of floor.
2. Using dip and roll method to apply product across the surface
   - Maintain wet edge
   - Do not apply heavier than recommended coverage rates
3. Back roll the surface with 18" x 3/8" nap roller by walking into the wet material wearing spike shoes and roll the surface wall to wall with overlap perpendicular to your first pass
   - Do not overwork material
4. ✓ Allow coating to dry 24 hours
   Do not force dry.
   Recoat: 16-24 Hours
   Light Traffic: 48 Hours

SLIP RESISTANCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3. See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.

CLEAN-UP

Clean-up mixing station, tools, and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health, and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes. See Crown Polymers Technical Bulletin: 8 Care and Maintenance.

TECHNICAL SUPPORT

For questions, contact a Crown Polymers Representative. Additional Support Documents are available from Crown Polymers, including brochures, application guidelines, videos and more. Visit Crownpolymers.com or contact Crown for additional resources

DISCLAIMER

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