8120 High Traffic Urethane

Technical Data Sheet (TDS)

PHYSICAL PROPERTIES

VOC	<50 g/L
SOLIDS CONTENT	98%
VOLUMETRIC MIX RATIO	Full Kit
COVERAGE RATE	500 ft²/gal 3.2 Mils
APPLICATION TEMP	50°- 90°F
POTLIFE 1 Gal mass @ 75°F & 50% RH	30 Mins
DRY TIME @ 75°F	4-10 Hours
RECOAT WINDOW	12-24 Hours
FULL CURE	7 Days
PACKAGING	1 Gal Kit 4 Gal Kit

MECHANICAL PROPERTIES

GLOSS INDEX 60° ASTM D523	70-80
TENSILE STRENGTH ASTM D2370	4,500 p.s.i
ELONGATION ASTM D2370	5%
ABRASION RESISTANCE ASTM D4060	30 mg Loss
IMPACT RESISTANCE ASTM D2794	160 in./Lbs
KONIG HARDNESS ASTM 4366	150

CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

8120 High Traffic Urethane is a high solids, three-component aliphatic polyurethane finish coat with excellent abrasion and wear resistance. It is available in clear gloss and limited colors in pigment packs. It cures to an inert, tough, impact, abrasion, and chemical resistant finish coat. It is VOC Compliant in all states and provinces in North America.

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

BENEFITS

- Complies with USDA, FDA, FSMA. See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.
- Slip Resistance (ADA) See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.
- LEED requirements. See Crown Polymers Technical Bulletin: 5 LEED information
- Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC Compliance

COLORS

Clear Gloss

LIMITATIONS

- Do not add additional solvents
- Do not apply direct to concrete, use appropriate primer/sealer first
- Do not apply heavier than recommended coverage rate

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 1/4” 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 30 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 3A:1B by volume into a clean 5-gal bucket and add C-component at a rate of 4 lbs per gal 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

500 Ft² / Gal @ 3.2 mils

WORKING TIME

15-25 Minutes @ 75°F

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 10 minutes ahead of application of main body of floor.
2. Using a paint tray dip and roll material across surface using 18”x1/4” mohair roller
   - Maintain wet edge
   - Do not apply heavier than recommended coverage rates
3. Back roll the surface with 18” x 1/4” 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 4-10 Hrs @ 75°F
   Do not force dry.
   Light Traffic: 24 Hours
   Heavy Traffic: 48 Hours
   Equipment Traffic: 72 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

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