8104 CrownSeal

Technical Data Sheet (TDS)

PHYSICAL PROPERTIES

VOC CONTENT	<20 g/L
COVERAGE RATE	500-700 ft²/gal (2.3-3.2 Mils WFT)
APPLICATION TEMP	45°- 105°F
TACK FREE @ 77°F & 50% RH	60-90 Mins
WALK-ON TIME	12 Hours
FULL CURE	7 Days
PACKAGING	1 Gal

MECHANICAL PROPERTIES

ABRASION RESISTANCE ASTM D 4060	<30 mg Loss

CHEMICAL RESISTANCE

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

PRODUCT DESCRIPTION

8104 CrownSeal is a single-component solvent-based ceramic clear coating designed to provide a UV stable, durable, and wear resistant surface with excellent abrasion, impact, and scratch resistance.

TYPICAL USES

- Military/Aircraft/ Aerospace
- Warehouse
- Storage
- Clean Rooms
- Retail
- Pharmaceutical Floors
- Educational Facilities

BENEFITS

- Complies with USDA, FDA, FSMA. See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.
- 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

- Will not adhere to silicone or polymer modified grout
- Porous substrates should be pre-sealed prior to application of 8104
- Surface should be dry prior to application
- Previously coated surfaces should be abraded with 220 grit sanding screen prior to application

SHELF LIFE

12 Months 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
Stir Stick
Pump Sprayer
18 or 24” Microfiber Flat Mop

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 7-9.
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 psi but below 25 psi 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 45°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.

MIXING

1. Stir the contents thoroughly using a stir stick to get all particles into suspension prior to application

COVERAGE RATE

500-700 Ft² / Gal @ 2.3-3.2 mils WFT

COVERAGE RATE MAY VARY DEPENDING ON SUBSTRATE POROSITY.

APPLICATION PROCEDURE

POROUS SURFACES SHOULD BE PRE-SEALED PRIOR TO 8104 APPLICATION

1. Pour material into a solvent based pump sprayer

WARMER AMBIENT AND SURFACE TEMPERATURES WILL REDUCE WORKING TIME

2. Spray a light amount of product onto the surface using solvent-based pump sprayer in front of microfiber flat mop in a single direction. Recommended thickness is 2.3-3.2 mils wet film thickness.
   - Maintain wet edge
   - Do not overwork product
   - Do not apply heavier than recommended coverage rates
3. Apply secondary coat in same manner perpendicular to first application within 24 hours
   - Maintain wet edge
   - Do not overwork product
   - Do not apply heavier than recommended coverage rates

✓ Allow coating to dry, Do not force dry.
Foot Traffic: 12 Hrs
Full Cure: 7 Days

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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