# 8090 CrownGloss WB Urethane

Technical Data Sheet (TDS)

# **PRODUCT DESCRIPTION**

Clear Gloss, Water-Based, Aliphatic Urethane Floor & Wall Finish Coating

8090 Gloss is a clear 2-component high-performance, water-based, aliphatic urethane floor and wall finish coat. Approximately 85 gloss read at a 60-degree angle with good resistance to chemicals, stains, abrasions, and scratches. It 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 subject to heavy foot traffic, forklift traffic and chemical attack. It is designed for use in Southern California and is in compliance with SCAQMD air quality standards for Industrial Use Only.

# PHYSICAL PROPERTIES

voc		<100 g/L
SOLIDS CONTENT		43%
VOLUMETRIC MIX RATIO	•••••	4A:1B
COVERAGE RATE		350 ft²/gal 4.6 Mils
APPLICATION TEMP		50°- 90°F
POTLIFE 1 Gal mass @ 75°F		35 Mins
<b>DRY TIME</b> @ 75°F		5-10 Hours
RECOAT WINDOW		12-24 Hours
FULL CURE		7 Days
PACKAGING		1 Gal Kit

#### **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.

- LEED requirements. See Crown Polymers Technical Bulletin: 5 LEED information
- Cures to an inert finish. See Crown Polymers Technical Bulletin: 2 VOC Compliance

# **MECHANICAL PROPERTIES**

GLOSS INDEX 60° ASTM D523	 85+
PENCIL HARDNESS	 2H

#### **COLORS**



Clear Gloss

# **LIMITATIONS**

- Do not add additional solvents
- Do not apply direct to concrete, use 8105/8106 CrownSeal as primer first
- Prime with 8303 if MVT is above 3 Lbs
- Do not apply below 30% Relative Humidity

# **CHEMICAL RESISTANCE**

Refer to CrownTech Chemical Resistance Guideline Technical Bulletin No. 9

#### 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 5-7 Mil Notched Squeegee 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 psi 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 Ft<sup>2</sup>/ 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.

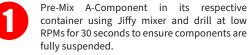
# PERSONAL PROTECTIVE EQUIPMENT (PPE)

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 20 MINUTES

#### **MIXING PROCEDURE**



- Pre-Mix B-Component in its respective container using clean Jiffy mixer and drill at slow speeds for 30 seconds or until thoroughly homogeneous.
- Transfer A-component and B-component at a mix rate of 4A:1B by volume into a clean 5-gal bucket (if adding aluminum oxide add #220 a rate of 1/2 lb./gal or #320 at a rate of up to 3 lbs./ 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**

350 Ft<sup>2</sup> / Gal @ 4.6 mils

COVERAGE RATE MAY VARY DEPENDING ON SUBSTRATE CONDITION

#### **WORKING TIME**

15-25 Minutes @ 75°F

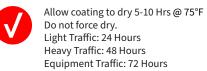
WARMER AMBIENT, PRODUCT AND SURFACE TEMPERATURES AS WELL AS HIGHER RELATIVE HUMIDITY WILL SHORTEN POTLIFE AND WORKING TIME.

#### APPLICATION PROCEDURE

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.

PRODUCT SETS SLOWER IN MASS, MIXED MATERIAL SHOULD BE POURED AS NEEDED

- Pour a band of mixed material across the surface roughly 6-8" wide. Use 5-7 mil notched squeegee to gauge material across surface
  - Maintain wet edge
  - Always pour next mixed batch onto wet edge
  - Do not apply heavier than recommended coverage rates
- 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



# **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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