

8205 CrownPrimer™ Oil Tolerant Primer

TECHNICAL DATA SHEET Product Number: 8205

Hydrocarbon Oils and Vegetable Oils and Animal Fats Tolerant Epoxy Primer

DESCRIPTION

8205 Oil Stop Primer is an epoxy, two-component, low viscosity product designed for use as a primer on concrete substrates that are contaminated with hydrocarbon oils, such as, petroleum products and their derivatives, motor oil, solvents, cutting oils, and hydraulics fluids. Also, the 8205 Oil Stop Primer is an effective primer when the concrete surface is contaminated by animal fats or vegetable oils. 8205 Oil Stop Primer possesses outstanding adhesion to contaminated concrete surfaces making it ideal for challenging oil and fat contaminated concrete surface applications. 8205 Oil Stop Primer is not intended to be used where contamination is from non-hydrocarbon lubricants and oils, such as silicone or lithium oils, pastes, greases, and compounds.

TYPICAL USES

- Air Craft Hangars and Maintenance Floors
- Automotive Repair Floors
- Commercial Kitchens Floors
- Food, Beverage and Spirits Processing Floors
- Laboratories and Research Floors
- Manufacturing and Warehouse Floors
- Mechanical Equipment Room Floors
- Meat and Poultry Processing Floors
- Pharmaceutical Floors

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act. **See Crown Polymers Technical Bulletin: 3 Food and Beverage Compliance.**
- Slip Resistance (ADA) **See Crown Polymers Technical Bulletin: 4 Coefficient of Friction.**
- LEED® and Green Seal® requirements. **See Crown Polymers Technical Bulletin: 5 LEED and Green Seal Information.**
- VOC and EPA Compliant all states and provinces in North America. Cures to an inert finish. **See Crown Polymers Technical Bulletin: 2 VOC Compliance.**
- Strong and Tough Floor
- Excellent Chemical and Abrasion Resistance
- Designed for new floors and for resurfacing old floors

LIMITATIONS

- This product is best suited for applications in temperatures between 60°F to 90°F (16°C to 32°C). **See Crown Polymers Technical Bulletin: 7 Temperature and Relative Humidity Limits.**
- Higher temperatures will result in shortened working times and faster drying time.

COLORS

Clear

Note: It is NOT recommended to pigment primers.

COVERAGE RATE PER GALLON

- Primer: 100 sq. ft. (14.9 sq. m.) 16 mils (WFT)

HANDLING and SAFETY

Warning! Eye and skin irritant. May cause dermatitis and sensitization. Always read and follow the product SDS. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, and spray. Use good ventilation.

CONCRETE

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers, and other bond breakers.

New Concrete:

- Place concrete per ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Floor Materials.
- Water Cement Ratio 0.4 to 0.5, and an approximate 4,000 psi (28 MPa) strength level.
- Requiring a positive side moisture barrier in direct contact with the concrete meeting ASTM E1745 Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- The moisture barrier needs to be placed per ASTM E1643 Standard Practice for Selection, Design, Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs, Class A 15 mils (0.38mm)

Existing Concrete:

If field tests or laboratory analysis reveals inferior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, use 8201 CrownPrime WBC. **See Crown**

Polymers Technical Bulletin: 20 Selecting a Primer.

- Contaminants include, but are not limited to organic hydrocarbon materials, calcium chlorides, and aluminum stearates.
- Concrete flooring slab can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.

Such conditions are detailed in ACI 201.2R “Guide to Durable Concrete” published by the American Concrete

Institute. See Crown Polymers Technical Bulletin: 1 Concrete Surface Preparation.

CHEMICAL RESISTANCE DATA

See Crown Polymers Technical Bulletin: 9 Chemical Resistance Guidelines and Chart.

CHECK CONCRETE MOISTURE

The concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe). Refer to appropriate Technical Data Sheet limits and Crown Polymers Technical Bulletin: 6 Moisture

Physical Properties at 77°F (25°C)		
VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)		3:2
Standard Viscosity Clear, Mixed Epoxy and Hardener		100%
Standard Viscosity Clear, Mixed Epoxy and Hardener, at 50°F (10°C)		0 gr./lt.
Percent Solids Clear by Volume, (Pigmented Slightly Higher)		1200 cps
		35 Minutes
Pot Life is Reduced by Increases in Mass and/or Temperature		
	Cure Time at 77°F (25°C)	Cure Time at 50°F (10°C)
Dry to Touch	8 Hours	18 Hours
Light Traffic	24 Hours	48 Hours
Full Cure	7 Days	14 Days

Mechanical Properties at 77°F (25°C)		
Tensile Strength	ASTM D638	6,230 psi
Tensile Elongation	ASTM D638	11%
Compressive Yield Strength	ASTM D695	9,850 psi
Ultimate Compressive Strength	ASTM D695	19,500 psi
Ultimate Flexural Strength	ASTM D790	9,680 psi
Hardness, Shore D	ASTM D2240	75 – 80
Adhesion to Concrete	ASTM D7234	400 psi (concrete failure)
Water Absorption	ASTM C413	< 0.1 %
Flammability when Bonded to Concrete	ASTM D635	Self-Extinguishing
Moisture Vapor Transmission (maximum) *	ASTM F1869	3 lbs.
Concrete Relative Humidity Moisture % (maximum) *	ASTM F2170	75% RH
Microbial (Fungi) Resistance	ASTM G21	Passes #1
*If moisture or relative humidity exceeds the limits consult the Crown Polymers representative and refer to Crown Polymers Technical Bulletin: 6 Moisture Mitigation Negative Side Moisture Barrier		

Note: though testing is critical, it is not a guarantee against future problems. This is especially true if there is not a positive side vapor barrier or it is not functioning properly and/or concrete has contamination from oils, chemical spills, densifiers, excessive salts or other bond breakers.

Mitigation Negative Side Moisture Barrier.

CHECK TEMPERATURE & HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 5°F (3°C) or more below the surface temperature. Do not apply if humidity is at or above 85%. **See Crown Polymers Technical Bulletin: 7 Temperature and Relative Humidity Limits.**

SURFACE PREPARATION

Concrete must be cured 30 days and be clean, dry, and structurally sound. Surface must be shot blasted or diamond ground at transitions, terminations, penetrations, or congested areas where a shot blast equipment cannot be used to achieve an International Concrete Repair Institute Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers Coatings and Polymer Overlays ICRI profile of CSP 3 or greater. If the surface is diamond ground, use 16-24 grit diamonds and vacuum the floor twice to remove concrete dust. Excessive dust in the pores of the concrete can compromise adhesion. The pH of the concrete substrate should be at 9 or above. All bond-breaking material must be removed. **Adhere strictly to guidelines listed in the Crown Polymers Technical Bulletin: 1 Concrete Surface Preparation.**

APPLICATION EQUIPMENT

Depending on system applied: Disposable 3" brush for cutting in, variable low-speed drill (450 rpm) with Jiffy® type impeller mixing paddle, 3/8 inch nap non-shedding phenolic core roller and frame, stiff bristle brush, and V-notched rubber squeegee.

MIXING

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F (21°C to 27°C). Pre-mix the "A" and "B" components to ensure all raw material and pigments are dispersed uniformly. Box pigmented products if using different numbers for uniformity of color. **See Crown Polymers Technical Bulletin: 10 Mixing Guidelines.**

APPLICATION

Oil Stop Primer must be applied by notched squeegee at a rate of 100 square feet (9.3 square meters) per gallon (3.79 liters) and vigorously scrubbed into the surface with a stiff-bristled brush for at least 10 minutes per gallon and leveled with rolled with a 3/8 nap roller to achieve even coverage. After the initial cure check the surface of the Oil Stop Primer for transitory oils or fats that may have migrated to the surface. If transitory oils or fats, bond-breaking surface contaminants are present, clean the surface with soap and water, dry and lightly abrade. Tack wipe the surface with acetone and reapply the Oil Stop Product at 150 square feet (13.9 square meters). Place all steps per Crown Polymer Installation Instruction.

OPTIONAL ANTIMICROBIAL

The antimicrobial additive is a non-heavy metal biocide that can be added during the manufacturing process. The antimicrobial agent can be added to the topcoat only for an economical application or it can be added to each step of the application, primer, body coat, and topcoat, which is recommended for abusive environments. **See Crown Polymers Technical Bulletin: 11 Understanding the Optional Antimicrobial Additive.**

SKID-RESISTANCE

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

SHIPPING and STORAGE

Ship and store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

SHELF LIFE

Shelf life is 1 year from the date of manufacturer, provide the containers are unopened.

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 per federal, state, province, and local regulations.

MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong the 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

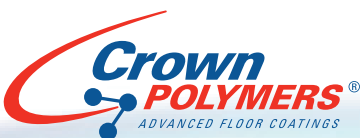
For questions, contact a Crown Polymers Representative. Additional Support Documents are available from Crown Polymers, including brochures, application guidelines, videos and more. Visit Crownpolymers.com or contact Crown for additional resources.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assumes all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards listed herein are the only ones, which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for any typographical errors.

LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Crown Polymers shall not be responsible for the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Crown Polymers reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.



Crown Polymers Corp. • Tel: 847.659.0300 • Fax: 847.659.0310
info@crownpolymers.com • www.crownpolymers.com
© 2020 Crown Polymers Corp. All rights reserved

CP 8205 CrownPrime Oil Tolerant Primer TDS 20210228 DM

Page: 4 of 4