# Technical Data Guide



07 19 16 Water Repellents

# MasterProtect® H 200

Clear, water-based 20% silane penetrating sealer

FORMERLY ENVIROSEAL® 20

# **PACKAGING**

- 5 gallon (19 L) pails
- 54 gallon (205 L) drums

Milky white; dries clear

#### YIELD

- Concrete:
- 100-175 ft<sup>2</sup>/gal (2.4-4.3 m<sup>2</sup>/L)
- 100-175 ft<sup>2</sup>/gal (2.4-4.3 m<sup>2</sup>/L)
- Stucco:
  - 60-100 ft<sup>2</sup>/gal (1.5-2.4 m<sup>2</sup>/L)

Always apply a test area to determine actual coverage rates. Coverage rates will vary greatly with the porosity of the substrate.

# STORAGE

Store in unopened containers in a clean, dry area between 35 and 110° F (2 and 43° C). Keep from freezing.

# SHELF LIFE

18 months when properly stored

# VOC CONTENT

Less than 350 g/L less water and exempt solvents.

# DESCRIPTION

MasterProtect H 200 is a clear, water-based 20% alkylalkoxysilane penetrating sealer. It protects against moisture and chloride intrusion.

# PRODUCT HIGHLIGHTS

- · Does not alter surface appearance
- Breathable to allow interior moisture to escape 1. Verify substrate has properly cured. Concrete without damaging sealer
- One component -for ease of application
- Protects against damage from moisture intrusion and chloride ion penetration

# **APPLICATIONS**

- · Horizontal and vertical
- Exterior or interior
- · Above grade

# **SUBSTRATES**

- Concrete substrates:
  - Architectural
  - Exposed aggregate
  - Glass-fiber reinforced
  - Precast
  - Cast in place/precast
  - Silica fume
- Hard burnt brick
- Stucco
  - Troweled/smooth Integrally colored
- Brick pavers
- Tile (unglazed)

# **HOW TO APPLY** SURFACE PREPARATION

- should obtain 80% of design strength, typically achieved within 14-28 days.
- 2. Clean all surfaces of all sand, surface dust and dirt, oil, grease, chemical films and coatings, and other contaminants prior to application. Power wash, sandblast, or shotblast as necessary to achieve the desired surface condition.
- 3. Air, material, and surface temperatures should be 40° F (4° C) or higher during application. Do not apply sealer when temperatures are expected to fall below 40° F (4° C) within 12 hours.
- 4. A dry surface is suggested for maximum penetration of sealer; however surfaces to be treated can be slightly damp. Do not apply MasterProtect H 200 if standing water is visible on the surface to be treated.
- 5. Crack control, caulking, patching, and expansion joint sealants can be installed before or after application of the sealer. Allow a minimum of 6-12 hours curing time for caulking and sealant materials (or until they have skinned over) before applying MasterProtect H 200. Following the application, remove excess product that might pond on a concave sealant joint.



# **Technical Data** Composition

MasterProtect H 200 is a water-based alkylalkoxysilane sealer.

# Compliances

- USDA acceptance on nonfood contact areas
- Alberta DOT, Type 1a

# **Typical Properties**

PROPERTY	VALUE
Solids and active ingredients, % by weight	20
Specific gravity, kg/L	0.98
Density, lb/gal)	8.16
Penetration, in (mm), average depth, depending upon substrate	0.14 (3.6)

# **Test Data**

RESULTS	TEST METHOD
> 200 (> 93)	ASTM D 3278, SETA
102	OHD-L-35
0.53	ASTM C 642
0–No Scaling	ASTM C 672
< 0.27 (< 0.16) 0.00 (0.00)	AASHTO T 259 and T 260
86 – exceeds criteria	NCHRP 244 Series II-cube test
92 – exceeds criteria	NCHRP 244 Series II-cube test
99 – exceeds criteria	NCHRP 244 Series IV - Southern climate
85.6	Alberta Transportation and Utilities Procedures - Type 1a
Unchanged	Federal Reflectance Test
	> 200 (> 93)  102  0.53  0-No Scaling  < 0.27 (< 0.16) 0.00 (0.00)  86 - exceeds criteria  92 - exceeds criteria  99 - exceeds criteria  85.6

Reasonable variations can be expected.

#### APPLICATION

- 1. Test a small area of the surface (generally a 5 by 5 ft [1.5 by 1.5 m] section) before starting general application of any clear, penetrating sealers to ensure desired performance results, aesthetics and coverage rates. Allow 5–7 days for the product to fully react before evaluating.
- **2.** Stir material thoroughly before and during application.
- 3.Low-pressure non-atomizing spray application is recommended.
- 4. On vertical surfaces, apply from the bottom up. Flood surfaces using enough material to get a 8–12" (20–30 cm) material rundown.
- For horizontal surfaces, apply to saturation. If necessary, follow with a squeegee or a broom for even distribution.

#### DRYING TIME

Typical drying time for MasterProtect H 200 is 4 hours at 70° F (21° C) and 50% relative humidity. Cooler temperatures or higher relative humidity can extend the drying time.

# **CLEAN UP**

Clean equipment and tools with hot soapy water. Overspray can be cleaned immediately with hot soapy water. Dried residue can be cleaned with a mild citrus-based cleaner or very hot water, then scrubbed with a soft-bristle brush.

# FOR BEST PERFORMANCE

- · Keep material from freezing.
- Do not dilute MasterProtect H 200.
- Water repellents perform best when applied to a dry substrate, when power washing is performed allow for a proper dry time before applying the water repellent.
- Do not apply during inclement weather or when inclement weather is anticipated within 12 hours.
- To prevent damage to nearby shrubbery and landscaping, cover or protect with drop cloth.
- Protect asphalt-based products such as roofing materials or plastic products from overspray.
- MasterProtect H 200 may leave a temporary slippery surface for up to several hours after application. Therefore, do not reopen trafficbearing surfaces until the treated surface is dry.
- Variations in the texture and porosity of the substrate will affect the coverage and performance of the product.
- MasterProtect H 200 will not inhibit water penetration through unsound or cracked surfaces, or surfaces with defective flashing, caulking, or structural waterproofing.
- Line striping can be done after application of the sealer.
- Make certain the most current versions of product data sheet and SDS are being used; visit www.master-builders-solutions.com/en-us to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

# **HEALTH, SAFETY AND ENVIRONMENTAL**

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.com/en-us, e-mailing your request to mbsbscst@mbcc-group.com or calling 1(800)433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

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