Technical Data Guide



3 03 35 00 Concrete Finishing

MasterKure HD 200WB

Hardening, sealing and dustproofing compound

FORMERLY KURE-N-HARDEN™

PACKAGING

5-gallon (18.9 L) pails 55-gallon (208 L) drums

COLOR

Clear

YIELD

150-200 ft²/gal (3.68 - 4.9 m²/L)

Coverage may vary with application method, surface conditions, and porosity.

STORAGE

Store in unopened containers in cool, dry area between 35 and 850 F (4 and 290 C). Keep from freezing.

SHELF LIFE

15 months when properly stored.

VOC CONTENT

0 g/L less water and exempt solvents.

DESCRIPTION

MasterKure HD 200WB is a water-soluble, inorganic, silicate-based curing, hardening, sealing and dustproofing compound. Use it for freshly placed and finished concrete and in renovation of aged concrete.

PRODUCT HIGHLIGHTS

- Protects floors during construction
- Easy to apply and quick drying for quick turnaround
- · Water based; no VOCs and easy to clean up
- Aids curing of concrete; minimizes shrinkage cracking and improves strength development
- Hardens concrete to withstand moderately heavy duty traffic
- Improved abrasion resistance to extend wearability

APPLICATIONS

- · Interior and exterior
- Above or below grade
- Concrete floors and pavements
- · Curing of fresh concrete
- · Renovation of aged concrete

HOW TO APPLY

SURFACE PREPARATION

NEW CONCRETE

- Freshly finished concrete surfaces require no surface preparation if MasterKure HD 200WB is applied immediately after the final finishing operation in place of a resin or acrylic curing compound.
- On areas where forms have been recently removed, all form oil or breaking compound residue must be removed prior to application.
- EXISTING CONCRETE (CURED 28 DAYS OR LONGER)
- Remove all dust and dirt, and ensure the surface is completely dry.
- 2. The surface must be free from all contaminants to allow penetration of MasterKure HD 200WB into the pores of the concrete.
- If acid is used to remove surface coatings, the acid must be neutralized and the surface flushed with water and allowed to dry completely before application of MasterKure HD 200WB.
- 4. Apply MasterKure[®] HD 200WB to a test area to verify effectiveness and final surface finish.

APPLICATION

MasterKure HD 200WB must fully saturate the concrete for maximum effect. Apply sufficient product to saturate the concrete without puddling.

NEW CONCRETE

- 1. After final finishing, as soon as all surface water has evaporated and the concrete can bear foot traffic, apply MasterKure HD 200WB with a low-pressure sprayer. Keep the entire surface wet with MasterKure HD 200WB for a full 30 minutes by spraying or by brooming excess material from low spots to saturate dry spots.
- As MasterKure HD 200WB begins to penetrate into the surface, lightly sprinkle the surface with water to aid penetration.
- 3. When the surface begins to dry a second time, flush with water and use a squeegee or broom to remove excess material or impurities that may have been brought to the surface.
- 4. To improve sheen, dry buff with a non-abrasive pad the following day.

- EXISTING CONCRETE (CURED 28 DAYS OR LONGER)
- Saturate the surface with undiluted MasterKure HD 200WB. Keep the entire surface wet with MasterKure HD 200WB for a full 30 minutes by spraying or by brooming excess material from low spots to saturate dry spots.
- 2. After 30-40 minutes, if most of the MasterKure HD 200WB has been absorbed into the surface, broom or squeegee any excess material from the low spots so it may be absorbed into the surface or completely removed from it. Flush floor clean with water.
- Alternatively, use a floor buffing machine with a non-abrasive pad to help work MasterKure HD 200WB into fully cured concrete during application.

DRYING TIME

- 1. MasterKure HD 200WB penetrates in approximately 30-60 minutes after application, depending on temperature, humidity and job conditions. Each application must penetrate thoroughly before proceeding with the next.
- A floor treated with MasterKure HD 200WB must completely dry before accepting any traffic.
 Allow 24 hours before subjecting to heavy traffic.

CLEAN UP

Clean brushes, tools and equipment with clean water immediately after use. Thoroughly flush sprayers. Dispose of unused material according to local regulations.

FOR BEST PERFORMANCE

- On exterior applications, rapid drying conditions may greatly reduce the effectiveness of MasterKure HD 200WB as a curing aid. It is the responsibility of the user to adjust the curing rate to properly regulate the hydration of the concrete.
- If MasterKure HD 200WB freezes, warm and restir to uniformity. If separation is persistent, discard product.
- Install joint sealants before application of MasterKure HD 200WB; if not possible, test first for adhesion.
- For subsequent coating applications, perform proper surface preparation and consult the coatings manufacturer for more instructions.

- · Spray application will yield best results.
- Dry buffing 24 hours after application will improve sheen of finished floor.
- Application method and concrete porosity will affect final appearance of MasterKure HD 200WB. White residue signifies too strong a mix or the surface reaching maximum hardness. Applications should be stopped and the surface flushed with clean hot water, scrubbed with a stiff-bristled broom and allowed to dry. If any applications remain, dilution of the product may be required to prevent whitening.
- Applications to concrete containing pozzolanic additives will require additional MasterKure HD 200WB.
- Do not allow MasterKure HD 200WB to come in contact with any glass, fabric, metal, or painted surfaces. Immediately wipe contaminated surfaces with a clean watersaturated cloth, then wipe dry with a second clean cloth.
- Allow at least 7 days after application before using adhesives over MasterKure HD 200WB.
- One application of MasterKure HD 200WB is normally sufficient. Repeat applications will ensure complete densification of concrete surface.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of product data sheet and SDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.
- 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 not for supervising or providing quality control on the jobsite.

Technical Data Composition

MasterKure HD 200WB is an alkalisilicate hardener.

Compliances

USDA compliant for use in meat and poultry areas

Test Data

PROPERTY	RESULTS	TEST METHODS
Compressive Strength, psi (MPa)		ASTM C 109, modified
Untreated	5,000 (34.5)	
MasterKure HD 200WB treated*	6,000 (41.4)	
20% increase in compressive strength at 3 days over untreated samples		
Comparative Abrasion Resistance, g loss		Taber Abraser CS-17 Wheel
1,000 g load, 1,000 revolutions		
Untreated sample	8, (100%)	
MasterKure HD 200WB treated*	6, (78%)	
20% increase in abrasion resistance over untreated samples		
Moisture Retention, g loss		ASTM C156
Untreated sample	90	

^{*}Application to fresh mortar. Abrasion resistance measured at 7 days, 70° F (23° C) and 50% relative humidity. Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

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Chemical Resistance

MasterKure HD 200WB treated*

30% improvement in moisture retention

Alkali-silicate hardeners can be used to increase resistance to chemicals including (but not limited to) the following:

Acetic acid, <10% Copper chloride Magnesium nitrate Sodium bromide Aluminum sulfate Copper sulfate Manure Sodium carbonate Ammonium carbonate Corn syrup Methyl alcohol Sodium chloride Ammonium chloride Cottonseed oil Sodium dichromate Mine water, waste Ammonium hydroxide Creosote Mineral spirits Sodium hydroxide, 10% Ammonium nitrate Cresol Molasses Sodium nitrate Ammonium sulfate Cumol Mustard oil Sodium nitrite Anthracene Ethyl alcohol Nickel sulfate Sodium sulfate Arsenious acid Ferric chloride Nitric acid, 40% Sodium sulfite Barium hydroxide Ferric nitrate Oleic acid. 100% Sodium thiosulfate Beef fat Ferric sulfate Olive oil Soybean oil Benzene Fish oil Paraffin Sugar Borax Formaldehyde, 37% Peanut oil Sulfur dioxide Boric acid Formic acid, 90% Phenanthrene Toluene Buttermilk Fruit juices Phenol, 25% Zinc chloride Calcium chloride Glucose Phosphoric acid, 80% Zinc nitrate Calcium hydroxide Glycerine Poppy seed oil Zinc sulfate Calcium nitrate Honey Potassium aluminum sulfate Calcium sulfate Humic acid Potassium carbonate Carbazole Hydrochloric acid, 10% Potassium chloride Carbonic acid Hydrogen sulfide Potassium dichromate Castor oil lodine Potassium hydroxide, 15% China wood oil Lactic acid, 25% Potassium nitrate Chromic acid, 10% Lead nitrate Potassium persulfate Chrysen Lead-refining solutions, 10% Potassium sulfate Cider Lignite oils Rapeseed oil Coal Linseed oil Rosin Coal-tar oils Machine oil Sea water Cobalt sulfate Magnesium chloride Sodium bicarbonate Coconut oil

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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