

MASTERKURE® N-SEAL-HS

High-solids acrylic curing and sealing compound for concrete

PRODUCT DATA

3 03390

Concrete
Curing

Description

Masterkure® N-Seal-HS is a solvent-based high-solids modified-acrylic-based liquid polymer product for new or existing concrete surfaces. The application of 2 coats will improve this product's concrete-sealing characteristics.

Yield

First coat:

One gallon will cover approximately 200 – 400 ft² (4.9 – 9.8 m²/L), depending on texture and porosity of surface.

Second coat:

One gallon will cover approximately 400 – 600 ft² (9.8 – 14.7 m²/L), depending on texture and porosity of surface.

Packaging

5 gallon (18.9 L) pails

55 gallon (208 L) drums

Color

Amber

Shelf Life

1 year when properly stored

Storage

Store in unopened containers in a clean, dry area between 40 and 85° F (4 and 29° C). Keep from freezing.

Features

- High gloss
- Ensures high curing efficiency
- Reduces surface absorption of concrete
- Compatible with many adhesives

Benefits

- Enhances the concrete surface finish
- Concrete attains its full strength potential
- Makes surfaces easier to clean and maintain
- Can be carpeted or tiled over

Where to Use

APPLICATION

- Curing freshly placed and finished concrete floors as classified in ACI Guide 302.1R, Table 2.1
- Sealing and dustproofing existing concrete
- Where removal of the curing compounds is not required

LOCATION

- Vertical and horizontal surfaces
- Interior or exterior

SUBSTRATE

- Smooth and textured concrete
- Precast concrete
- Paving stones
- Exposed aggregate
- Terrazzo

How to Apply

Surface Preparation

1. Freshly placed concrete surfaces must be properly finished. First coat should be applied uniformly as soon as possible after final finishing. The surface is application ready when it is damp but not wet and when it can no longer be marred by foot traffic.
2. Existing concrete surfaces should be thoroughly repaired and cleaned before application. Surface must be clean, dry, and free of dust, oil, grease, sealers, and all other surface contaminants that might inhibit proper bond of material.

Application

1. Thoroughly mix material in original container before applying.
2. Apply material to form a continuous, uniform film by brush, sprayer, or roller.
3. For sealing new or existing concrete, 2 coats are required.
4. Do not over-apply or soak concrete surfaces with the curing compound. Do not allow the curing compound to pool on the surface. Over-application can result in alligatoring and mud cracking, whereby a film forms on the substrate before the material dries properly. Over-application may also cause opacity, as elements of the curing compound become trapped in the subsurface and cannot escape.



Technical Data

Composition

Masterkure® N-Seal-HS is a high-solids modified-acrylic-based liquid polymer.

Compliances

- Complies with ASTM C 309, Type 1, Class A and Class B
- Complies with AASHTO M-148
- Complies with Corps of Engineers CRD C 304, Type 1, Class A and B
- Complies with Federal Specification TT-C-800A when applied at 300 ft²/gallon (7.3 m²/L)

Typical Properties

PROPERTY	VALUE
Solids content, %, by weight	30

Test Data

PROPERTY	RESULTS	TEST METHODS
Flash point, ° F (° C)	120 (48)	Pensky-Martens Closed Cup
Moisture retention test, kg/m ² , at 200 ft ² /gal (5 m ² /L) (ASTM C 309 requirement)		ASTM C 156
Masterkure® N-Seal-HS	< 0.55	
Test requirement not to exceed	< 0.55	
Moisture retention test, kg/m ² , at 300 ft ² /gal (7.5 m ² /L) (ASTM C 1315 requirement)		ASTM C 156
Masterkure® N-Seal-HS	< 0.4	
Test requirement not to exceed	< 0.4	

Test results are averages obtained under laboratory conditions. Expect reasonable variations. Field properties may vary.

Drying Time

Drying time is approximately 2 hours at 70° F (21° C) with relative humidity at 50%. Material will take longer to dry at either higher humidity or lower temperatures.

Times are based upon temperatures of 65 to 85° F (18 to 29° C).

Light foot traffic or between coats: 4 hrs

Normal traffic: overnight

Maximum hardness: 7 days

Clean Up

Clean tools immediately after use with xylene. Cured material must be removed mechanically.

For Best Performance

- Do not use as a curing compound for colored dry-shake floors.
- Hand-held sprayers are not recommended.
- Keep material away from heat, flame, or sources of ignition.
- Heating Ventilation Air Conditioning (HVAC) units may draw solvent vapors into occupied building interiors. Solvent vapors can be irritating to those unaccustomed to the odor. Do not apply in or around buildings occupied by nonconstruction personnel without consulting building management. Use only in areas with a minimum of 6 air changes per hour.
- Not intended for surfaces to receive concrete overlays or additional toppings, coatings, or sealers.
- Not recommended as a release agent.
- Do not use in areas that require resistance to solvents such as gasoline, diesel fuel, or paint thinners.
- If material will be applied in or near areas containing foodstuffs, they should be removed before application and until material has fully dried and all solvent vapors have dissipated.
- Do not apply to the interfacing of channels to be caulked. Mask channels to avoid adhesion problems.
- Can be applied to natural or colored concrete, but mottling or ambering may occur.
- May rubber burn (show tire marks) when subjected to forklift or other wheeled traffic.
- Masterkure® N-Seal-HS will highlight imperfections and may darken the final appearance of concrete surfaces.
- Make certain the most current versions of product data sheet and MSDS 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 Degussa personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

MASTERKURE® N-SEAL-HS

Caution

Risks

Combustible liquid and vapor. May cause skin and eye irritation. May cause dermatitis and allergic responses. Inhalation of vapors may cause irritation and intoxication with headaches, dizziness and nausea. Ingestion may cause irritation. May be absorbed through skin. Repeated or prolonged exposure increases the risk of absorption. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions

READ MATERIAL SAFETY DATA SHEETS (MSDS) AND TECHNICAL DATA GUIDE BEFORE USING. DO NOT USE UNTIL ALL BYSTANDERS HAVE BEEN WARNED OF PRODUCT HAZARDS. KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. KEEP OUT OF THE REACH OF CHILDREN. Vapors are heavier than air. DO NOT cut or weld on or near empty container. Empty container may contain explosive vapors or hazardous residues. Keep container closed. Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Wash exposed skin and clothing thoroughly after handling. DO NOT breathe vapors. Use impervious gloves and eye protection, and if the TLV is exceeded or product is used in poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations. All label warnings must be observed until container is commercially cleaned or reconditioned.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists, or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheets (MSDS) for further information.

Proposition 65

This product does not knowingly contain materials as listed by the state of California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

5.4 lbs/gal or 646.5 g/L, less water and exempt solvents.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

Degussa Building Systems

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Customer Service 800-433-9517
Technical Service 800-243-6739

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