

FLUOHARD™

Concrete Hardener and Dustproofers

MANUFACTURER

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PRODUCT DESCRIPTION

FLUOHARD is a concentrated, odorless concrete chemical hardener containing a colorless solution of 100% active fluosilicate chemicals with powerful anionic surface penetrating agents. FLUOHARD penetrates the concrete substrate and reacts at ambient temperatures with weak concrete surface ingredients to chemically change the concrete surface to one that is hard, flint-like and chemically resistant.

FLUOHARD contains scientifically balanced surfactants that guarantee in-depth penetration and maximum chemical reactivity.

Basic Use: FLUOHARD chemically treated surfaces assure four major benefits:

1. Alters soft, easily abraded, free lime materials into compounds with superior abrasive wear resistance.
2. Tightens surfaces to reduce contaminant absorption.
3. Excellent chemical resistance to most organic acids, esters, fatty oils, organic salts and petroleum products.
4. Membrane-free surface allows proper bond of varied paints, and tile adhesives and is recommended for concrete tile surfaces scheduled to receive carpeting.

FLUOHARD is recommended for use in high traffic areas such as warehouses, truck terminals, bus terminals, appliance warehouses, and in food processing plants such as meat packers, dairies, breweries, bakeries. It is also appropriate for use in areas with high foot traffic such as civic centers, sports arenas, stadiums, hospitals, airports and universities.

ESTIMATING

FLUOHARD is available in 5-gallon (18.9 liter) and 55-gallon (208 liter) containers. Containers are identified with product name and batch code. See back page for application rates.

TECHNICAL DATA

Applicable Standards:

- FED. SPEC. CEGS 03300 4-79
- Dept. of Navy, Veterans Administration, GSA-Recommended for ACI 302, Class 1 through 4, Concrete Floors
- USDA approved
- VOC compliant

Typical properties:

Type, solids	-	Magnesium and Zinc Fluosilicate
Specific Gravity	-	1.141
Bulk Density	-	9.52 pounds/gallon
Flash Point	-	none
Viscosity	-	water like
Color	-	Clear
VOC, gm/l	-	0
Applications, minimum	-	2

INSTALLATION

Surface Preparation: Concrete surfaces must be structurally sound and clean. All residues, oil, laitance, curing compounds, bond breakers or other contaminants must be removed from surfaces for maximum penetration.

Application Rates:

FLUOHARD is concentrated and must be diluted with water prior to use. Two separate saturation applications are required for good results on most floors. A third coat may be required on porous or broom-finished concrete, applied at full strength. Flood floor evenly using a soft bristle broom or sponge broom. Keep wet for 15 minutes. Mop up or squeegee off all puddles. Allow area to dry between applications.

IMPORTANT: If excessive white crystals are noted after the first or second coat, maximum saturation has been achieved or too strong of a mix is being used. Excess white crystals must be immediately removed by scrubbing areas with hot water and a stiff brush. If any applications remain, the dilution may be increased to avoid further problems.



FLUOHARD



<u>Application Rates of Diluted Material:</u>			<u>Dilution Ratio</u> Water:FLUOHARD
Light troweled, broom finished floors	First coat	100 sq.ft./gallon (2.5 m ² /L)	1:1
	Second coat	250 sq.ft./gallon (6.0 m ² /L)	1:2
Tight, hard troweled floors	First coat	200-300 sq.ft./gallon (5.0-7.5 m ² /L)	1:1
	Second coat	250 sq.ft./gallon (6.0 m ² /L)	1:2

NOTE: Rough, porous floors may require a third, undiluted coat.

FOR BEST RESULTS:

- New concrete must be thoroughly dry and cured a minimum of 10 days with water or polyethylene film.
- All membrane curing compounds and bond breakers must be removed first to assure penetration and maximum chemical action.
- Apply when concrete temperatures are above 40°F (4°C) and rising.
- Do not use on colored concrete.
- **FLUOHARD** is corrosive to glass, metals and painted surfaces. Immediately flush with water and wipe dry.
- Protect prescription glasses to avoid possible etching of surfaces.
- Protect from freezing.

PRECAUTIONS

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not take internally. Wear skin and eye protection. Please refer to product Material Safety Data Sheet (MSDS) before using.

STORAGE/SHELF LIFE

FLUOHARD containers are to be stored in a clean, dry area between 40-100°F (5-40°C). Shelf life of **FLUOHARD** in unopened containers is a minimum of two years if properly stored. Do not freeze.

WEBSITE

L&M's convenient internet website offers instant access to Tech Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Visit www.lmcc.com and follow the easy steps. L&M is ready to respond to your concrete information needs - anytime - anywhere!

SHORT SPEC

033000: Chemical hardener, clear, VOC compliant, zinc and magnesium fluosilicate chemical hardener. Two coats minimum. Five year warranty against dusting. "**FLUOHARD**" by L&M Construction Chemicals, Inc.

LIMITED WARRANTY

Contact L&M for information on a five year performance warranty against dusting due to abrasion.

This product is warranted to be free of defects in material and workmanship, and conform to L&M Construction Chemicals ("L&M") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose. Satisfactory results depend upon many factors beyond L&M's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. L&M shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. L&M's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.

For Professional Use Only.

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