

## FloArm Hard LI +

Liquid Densifier, Sealer, and Dustproofer for Concrete



### TECHNICAL DATA SHEET

#### Product Description

FloArm Hard LI + is a water-based lithium silicate solution used to densify, seal and dustproof concrete surfaces. FloArm Hard LI + penetrates and chemically reacts within the concrete surface, producing extremely hard and dense calcium silicate hydrate (CSH) in the pores. The result is concrete that is more durable, easier to clean, and more resistant to damage from water and mild chemicals. Because the product of the lithium silicate-concrete reaction is formed internally, the protection of FloArm Hard LI + never peels or flakes off, is unaffected by moisture, and lasts much longer than surface sealers and coatings.

#### Uses

- Interior concrete floors
- Commercial and retail floors
- Warehouse floors
- Manufacturing plants
- Distribution centers
- Transportation terminals
- Institutional floors
- Health care facilities
- Clean rooms
- Mechanical rooms

#### Features and Benefits

- Seals, densifies and dustproofs concrete in one operation
- Water-based, low VOC
- Treated concrete is more dense and durable
- Permanent treatment that never peels off
- Makes concrete easier to maintain

#### Application Methodology

##### Step no.1: Surface Preparation (New Concrete):

Cure the concrete by a wet or sheet cure method in accordance with ASTM C171, or with a curing compound that meets the requirements of ASTM C309. MYKA curing compound Armix Cure WB is recommended. To maximize strength and other physical properties of the concrete slab, new concrete should cure seven days or longer before application of FloArm Hard LI + for fast track projects, the cure time may be reduced at the discretion of the project engineer. If a curing compound is used, it must be completely removed before application of FloArm Hard LI +. After the curing method is removed, allow the slab to air dry a minimum of 24 hours prior to application. Insufficient drying of the concrete will prevent full penetration of FloArm Hard LI +, reducing its effectiveness.

**Surface Preparation (Existing/Older Concrete):**  
Concrete must be clean and free of any materials that could prevent penetration of FloArm Hard LI +, such as curing compounds or cure & seals, paints, coatings, dirt/oil, waxes, etc.

##### Step no.2: Application (New or Old Concrete):

Air temperature during application must be between 35°F and 100°F (2°C and 38°C) for proper chemical reaction of the FloArm Hard LI +. Apply a single coat of FloArm Hard LI + using a low pressure sprayer equipped with a 1.9 L/min spray tip. Apply at a coverage rate that results in a uniformly wet surface without puddles.

While FloArm Hard LI + is still wet, use a soft-bristle broom or microfiber pad to redistribute and evenly spread out the material. Do not continue to brush or spread out FloArm Hard LI + once the product begins to dry. Keep the floor wet with FloArm Hard LI + for 5-10 minutes.

Do not allow excess FloArm Hard LI + to puddle and dry on the floor. This may result in a white residue that must be removed immediately with scrubbing.

If immediate surface sheen is desired, dry buff or burnish the floor with a polishing pad appropriate for the desired end gloss result.

**Floor Joints:** If the floor joints are to be filled after FloArm Hard LI + has been applied, they must be thoroughly cleaned before installation of joint filler. Cleaning joints by circular concrete saw or a grinder equipped with a wire wheel is recommended.

##### Clean-Up

Clean brushes, tools, equipment and flush sprayer with potable water immediately after use.

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#### Precautions/Limitations:

- Protect FloArm Hard LI + from freezing. In the event of freezing, thaw and stir or agitate before using.
- Protect metal, glass, wood, paint or brick from contact with FloArm Hard LI +. If accidentally over sprayed on these surfaces, wash surface with clean water immediately.
- If added abrasion resistance is required in new construction, consider the use of a dry shake floor hardener. Such as FloArm Hard Q & FloArm Hard QM.

#### Technical Data

Appearance	Clear to cloudy liquid
Chemical Base	In organic Silicate solution
Viscosity	Water like
pH	11
Specific Gravity @ 27°C	Approx. 1.15-1.16 gm/cc
Active content	22.0 to 23.0%
Surface Breathability	Breathable
Skid Resistance ASTM E 303	Good
Application	Densification, Hardener and Sealer
Reduction in water absorption ASTM D 6489	More Than 60 %
VOC Content	< 5 g/l
Freeze point	32°F (0°C)
Application Temperature	+2°C to +40°C
Minimum cure Temperature	+5°C
Foot traffic	After approx. 1 to 2 hours at +23°C
Max. Hardness	After 7 days at +23°C

#### Consumption

1 ltr will give you 65 to 210 sft. (6 to 20 sqm) of concrete depending upon the texture and porosity of the surface.

#### Packaging

FloArm Hard LI + is supplied in 50 kgs and 225 kgs barrel.

#### Storage and Shelf Life

12 months from the date of production if stored in cool dry place under shaded area, away from any extreme temperature or direct sunlight.

#### Health & Safety

FloArm Hard LI + should be applied with gloves and care should be taken to see that it does not fall on skin or eyes. Splashes on to eyes have to be immediately washed with plenty of clean water and medical advice has to be taken.

#### Product Categories Available



#### Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.