
Specifications for Application of Fluorolast SB Protective Coatings over Concrete Surfaces



A. Precaution

Read the MSDS on this product. Fluorolast SB contains solvents and chemicals. Adequate safety and health precautions should be taken during handling, application, and drying of this product. The material should be applied under local, state, and federal regulations as well as in accordance with OSHA and ANSI bulletins on safety requirements. Use caution when handling this or any other solvent-based coating.

B. Suitability to Application

A Fluorolast representative may be requested to assist with questions pertaining to the use or application of its coatings.

C. Equipment

High solids content formulas of Fluorolast SB can only be applied with a brush, squeegee or roller and produce fast application of the coating. Spraying of SB formulas with 30% or less solids content is possible with suitable airless spray equipment only. Please refer to the MSDS sheet regarding special personal-protection equipment information.

D. Primers Sealers and other Undercoatings

In order to seal the concrete and provide a surface most conducive to adhesion of the Fluorolast coating, use a quality epoxy primer (non-resistant to MEK) that has been specified by its manufacturer for use on the type of concrete involved.

A properly applied primer/sealer should be able to penetrate the porosity of the concrete, and serve as an anchor coat for adhesion of the Fluorolast SB topcoat. The primer/sealer used should be a solvent-borne type (depending on conditions of the concrete and/or intended service) and not totally resistant to MEK.

Fluorolast SB may be applied over a wide variety of base coatings including both polyurea and polyurethane type products to provide chemical resistance far beyond the capabilities of those thick-film protective coatings. Contact Fluorolast for details pertaining to the specifics of conditions and type of service environment involved.

E. Surface Preparation

If top coating a previously-applied primer or sealer, follow the manufacturer's instructions for surface preparation and application procedure. Similarly, start with a clean, dry substrate that is free of contaminants. The temperature of the substrate should not be too warm or hot in order to allow adequate wetting out of the Fluorolast SB coating during application.

F. First Application

After the primer has dried sufficiently, *always* use Fluorolast LC-8120 as the first topcoat. The 8120 will wet out nicely and serve as a foundation to anchor the ensuing coats of SB coatings. When ready to begin application, pour the CA-20 catalyst (7% by wt./ 12 1 by volume) into the container of the Fluorolast LC-8120 selected.

Stir for a few minutes so that it will go into complete solution with the coating. Fluorolast premeasures the bottle of catalyst accompanying each container of coating to the correct amount prior to shipment.

For best results, air and surface temperatures during application should be at least 50°F and no more than 130°F and at least 5°F above the dew point.

Commence the SB coating procedure.

A key point is that, as with all Fluorolast SB products, the coating should be applied in a moderately wet thickness amount (not so overly generous that it would result in heavy pools of standing wet coating). Applying relatively thin coating layers will not only allow the coating to dry faster and more uniformly; but will also greatly reduce the risk of solvent entrapment and blistering.

G. Subsequent Applications and Drying Time

It is vitally important that adequate drying time between coating applications (in conjunction with other conditions) be permitted. Again, this will allow the solvent in the coating solution to evaporate out of the film and avoid solvent entrapment. A presence of higher temperatures and/or lower humidity will reduce the SB coating's drying time (see Section E above). At 70°F and 50% RH, this can be as little as 20-30 minutes for low solids SB coatings (LCB-8220 or LC-8120).

The higher solids content SB coatings (i.e., LC-8130, LC-8135 & LC-8140) are noticeably more viscous. Similarly, because of their higher solids characteristics and due to certain conditions present, they may also require some additional effort to put down and slightly more time to dry before subsequent coats can be applied. It is imperative that you not begin the next coating application until the previous one has been allowed to dry sufficiently.

You may normally be able to apply the second coating application (using higher solids Fluorolast SB) within one half hour or less after the coat of LCB-8220 has been put down. However, all conditions affecting evaporation and suitable drying should be considered. As with most other solvent-borne coatings, conditions involving temperature and humidity variations may require adjustments in time between each application to allow the solvent to evaporate out of the film.

H. Alternating Colors

To simplify the multi-coat application process, the applicator may consider alternating colors (i.e., black, gray, black, gray, etc.) with each respective coating application. This method removes any visual uncertainty caused by putting the "same color over itself" with each succeeding coating application.

I. Achieving Desired DFT

Using the technical data sheet that details the dft of each Fluorolast coating formula as a guide, put on as many coating applications as necessary to reach the final dft of protective coating thickness desired. Keep in mind that drying time may increase with each of these additional applications for the reasons already described.

Electronic thickness gauges are available on the market for measuring coating film thickness.

J. Cure time

Under normal circumstances, Fluorolast SB coatings will cure ambiently after about 3 to 5 days from the end of application. As with other coatings, ambient cure time projections are dependent upon variable conditions such as atmospheric temperature, relative humidity, wind speed, direct sunlight, etc. After curing, the coating will have a visually glossy surface.

Other conditions can simulate a force curing of the coating often resulting in reduced cure time. These include areas of very warm or hot temperatures within industrial plants as well as newly coated concrete substrates located outdoors that are exposed to direct sunlight and its infrared heat

K. Clean Up

Use of MEK or Acetone will dissolve and remove unwanted dried coating from equipment and surfaces. The proper disposal of any remaining unused catalyzed coating, brushes, solvents, etc. should be observed and followed according to established code.

L. Maintenance of Fluorolast SB Coatings

Care should be taken not to perform activities on the coating before it has been fully cured. Similarly, if solvents or other chemicals are to be used in the coated area, be sure they are compatible with the chemical resistance of the Fluorolast coating as originally intended.

Hot work (blowtorch, welding) should not be performed in the proximity of coated areas unless a heat blanket is used to protect the coating. Fluorolast coatings are formulated to minimize hazards from many acids and chemicals but not against contact with super high temperature sparks or cinders.

Fluorolast coatings are formulated to stand up to incidental foot and some vehicle traffic (rubber tires). Use special caution if it is necessary to bring heavy equipment onto the coated area so as not to cause damage to the coating.

Where gravel or other sharp objects may become embedded in the tires of vehicles that will be operating on the coated surface, it is highly recommended that a sacrificial rubber mat or sheet of sufficient thickness (i.e. two old conveyor belts) be placed over the traffic area to protect the coating from being punctured.

Fully-cured Fluorolast coatings are designed to withstand normal operating conditions as discussed with your Fluorolast representative prior to application. If conditions other than those discussed do arise, please contact Fluorolast for technical assistance in addressing them.

M. Repairing Damaged Fluorolast SB Small areas

In case of damage or blisters after the Fluorolast coating has been installed, the coating may be easily repaired via the following procedure.

Using a sharp blade, cut out and remove the damaged section. Use a clean, (water) damp cloth to wipe dirt and dust from the damaged area sufficiently. If the area has been chemically contaminated, use either MEK or Acetone in place of water to clean the surface. In either case, spare no effort to clean the surface of the bare substrate and the fringes of the coating surrounding it. Allow the area to dry completely.

Next, apply moderately thin coats of Fluorolast SB (allowing each to dry before applying the next as per Section H) onto the damaged area. Allow the coating to dry and cure. SB will bond to itself securely and result in a seamless adhesion over the repaired area.

N. Repairing Damaged Fluorolast SB Large areas

If a larger area of Fluorolast coating is damaged, please contact Fluorolast and describe the conditions and situation. Major repairs should be discussed with a Fluorolast representative first.

O. Coating Storage, Shelf Life & Pot Life

When stored properly in a moderate temperature environment, the UN-catalyzed Fluorolast SB coatings have an indefinite shelf life. With the introduction of catalyst into the coating, typical pot life is 1-3 hours with normal coating agitation.

The addition of the catalyst along with normal evaporation of solvent out of the coating will slowly increase the viscosity of SB coatings. If during application, the catalyzed coating remaining in the container becomes too thick, use a small amount of MEK to thin.

The presence of high temperatures or having the lid removed without agitation of the coating will increase the rate of both the evaporation and curing process which could reduce pot life accordingly.

P. Contacting the Company

Fluorolast is available to offer assistance when you encounter questions involving the application and use of its protective coatings. Please refer your questions and requests for information to us by phone during regular business hours at (800) 785-3601. You may also contact us by fax at (330) 339-1515 or send e-mail to fluorolast@lauren.com. Visit us on the Internet at www.fluorolast.com.

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