
General Application Specifications for Fluorolast WB Protective Coatings



A. Suitability to Application

Refer to and read the MSDS on this product. A Fluorolast representative may be requested to assist with questions pertaining to the use and application of its coatings. Applications involving the coating of metals or concrete have separate instructions more specific to those substrate types. Fluorolast can provide these upon request.

B. Equipment

1. For best results, use airless spray equipment to apply Fluorolast WB coatings onto all types of substrate surfaces. While air-assist spray equipment (cup gun) may also be used in some cases; brushing, squeegee-ing, or rolling the coating onto the surface is NOT approved or acceptable.

2. Special protective clothing may be optional when applying Fluorolast coatings. Customary measures such as goggles and a simple breathing apparatus (to filter suspended particles from entering the nose and mouth) are recommended. The coating is not normally an irritant to skin. See MSDS on this product.

C. Surface Preparation

Prior to commencing coating application, the surface of the substrate should be cleaned to remove all contaminants such as oil or grease (solvent washed). Depending upon the type of substrate, abrasive blasting may also be an option. If using Fluorolast coatings as a top coat over another (epoxy-type) film, follow that product manufacturer's instructions for preparing the surface for acceptance of its coatings.

D. Application of Fluorolast WB Coatings

As called for by the type of application, the Fluorolast coating will be either from series WB100 or WB200. Either way, do NOT add water or any other ingredients of any kind to Fluorolast coatings, as that will negatively affect the delicate balance of their formulas.

Dependent upon the type of application involved, Fluorolast will make a recommendation as to the optimum dry film thickness (dft) of the protective coating required. Upon acceptance by the facility owner and/or engineer, the protective topcoat will be applied as follows:

1. For best results, atmospheric temperature conditions as well as surface temperatures of the substrate should be at least 60° and up to 140° F.

2. Surfaces not to be coated may be shielded or covered (tarp, plastic, etc.) to reduce potential over-spray contact. However, due to the dry fall nature of the coating, surfaces of objects in relative proximity may only receive a harmless dusting of dry particles with no appreciable adhesion capabilities.

3. The two-component Fluorolast WB200 series coatings are delivered with a pre-measured catalyst (7% by wt. /10-1 by volume) in a small, separate container. The catalyst should be added about 10 minutes prior to the intended application of the coating and stirred (not shaken) thoroughly prior to use in order to achieve uniform coating dispersion.

4. Using airless spraying equipment, both Fluorolast WB coatings should be applied in multiple passes onto the prepared surface. It is imperative that the coating NOT be applied too heavily per pass so to avoid problems with runs, drips, and water entrapment within the coating film. In an environment with less than ideal conditions, too heavy an application can result in the formation of blisters and ultimate coating failure.

5. As with any other coating, drying time projections are dependent upon variable conditions such as: atmospheric temperature, relative humidity, wind speed, direct sunlight, etc. Under less than ideal conditions (minimum atmospheric and substrate temperatures, high RH); spray on Fluorolast WB coatings in a manner that will produce only about 1½mils wet thickness per application. This will result in about a 1-mil dft (dry film thickness) which may be attained in about 20 minutes or less. In room temperature applications, applying the coating too thickly for conditions could make necessary a much longer drying time (an hour or more) before re-coating.

6. In the most IDEAL environments where both the atmospheric temperature and that of the substrate are considered very warm or hot (80°F 140°F+), and, with an experienced applicator, it may be possible to apply the Fluorolast WB more heavily via more passes of the spray gun. This advanced procedure can be successful only when great care is taken. When done properly, however, the desired dft may be achieved in less time by reducing the number of coating applications necessary.

a. Under the above conditions, Fluorolast WB may be sprayed repeatedly onto the target substrate. Here, as many as two, three, four or more passes of the Fluorolast coating hit the substrate. Each continuous pass will appear to dry almost on impact to a DULL finish. Each also causes the substrate to cool.

b. CAUTION: When a spray pass is made which results in a wet or shiny finish, then STOP! The substrate has now been cooled to the point that to continue applying coating could result in water entrapment and ultimate failure. It is now imperative that this section be allowed to dry to the touch before additional coating is applied using this same procedure. To repeat this procedure, the substrate's surface temperature must again be made very warm or hot as before.

7. After the coating has been allowed to dry to the touch, (and depending upon which of the above two application methods were

used) the second and subsequent coats may then be applied in the same respective procedures until the desired film thickness has been achieved.

a. Thus, in a worst case scenario; for a dry film thickness of 10 mils of Fluorolast; the coating procedures under the less than ideal conditions may require as many as 10 individual spray applications.

b. Conversely, when more ideal conditions are present along with a very warm or hot substrate, the amount of application passes and associated drying times between them can be reduced. Similarly, the amount of time involved in the coating process would be significantly less. However, it should be emphasized again that this method should be attempted ONLY when the surface temperature of the substrate is suitably elevated and then, only by an experienced applicator.

8. DFT of the Fluorolast coating can best be measured with an electronic thickness gauge.

9. The Fluorolast coating may be applied around penetrations such as pipes, drains, pumps, and tank bases to provide chemical protection in these areas also. For this reason, it is recommended that whenever possible, a fluoroelastomer caulk or extrusion be utilized where expansion joints, cracks, or where application of coating would not otherwise suffice. The Fluorolast coating will normally adhere to these materials very well and, also help form a seamless barrier of protection against corrosion.

10. The Fluorolast coating should be applied at sufficient and uniform thickness through out the surface area to be coated to insure the successful performance of the coating. As mentioned above, Fluorolast will make recommendations as to the optimal dry film thickness for each application in advance.

11. Be continually vigilant with regard to maintaining a clean, dry surface both prior to and during application of the coating when, due to work conditions, the work area could become susceptible to dust or other contaminants. These must be removed prior to the initial coating application by wiping the surface with a clean cloth dampened with water or, if acetone. Soon after it is allowed to dry, the Fluorolast coating may simply be wiped clean with a suitable damp, lint-free cloth prior to subsequent coating applications.

12. If it becomes apparent that the workday will end without completion of the application project (with regard to achieving desired dft); it would be advisable to: finish the current coating pass over the entire project substrate in order to assure uniform dft to that point. Afterwards, upon returning to the work site to continue the application process, it is recommended that you take care to inspect that the surface still remains free of contaminants and dust before commencing with additional coating applications.

13. Depending upon conditions during application, Fluorolast WB coatings will remain receptive to multiple coats prior to full-curing. However, it is not desirable that subsequent applications of coating for achieving dft be applied over cured or nearly-cured coating without adequate surface preparation.

14. In very warm or hot environments or where the coating is subject to direct sunlight there is a likelihood of significant increase in the speed of the cure process. Thus, when these conditions present themselves; consider dividing the entire project area into smaller individual sections which, could then be more readily brought to desired dft in a reduced timeframe.

15. Take care to prevent contamination of the newly-sprayed, uncured surface during the application process itself by protecting

the substrate against dust, solvents, and other undesirable impurities prior to its receiving its final coating application. For this reason, applicator personnel working on, walking on or around the uncured work surface should wear Tyvek type shoe covers.

16. All solvents should be stored outside of the area to be coated so to prevent the possibility of contamination during the application process.

E. Clean Up Procedure

Personal clean up is done with warm water and suitable detergent for washing followed by a warm water rinse. Cleaning of tools and spray equipment is similarly easy with this method. If the coating has been allowed to dry for a long time on (or in) the spray gun equipment and can no longer be easily removed with soap and water, Acetone or MEK will work well.

F. Cure Time of Fluorolast WB Coatings

1. The Fluorolast WB100 is designed and formulated to be force-cured with a temperature of 270°F for one hour. If desired, an additional post-curing process @ 400°F (same time) can follow. Before using this process, be sure of the temperature tolerances and limits of the substrate involved.

2. While these processes are typically done in an industrial oven, certain conditions (ie. areas of very warm or hot temperatures within industrial plants) exist which may actually duplicate this condition for metal substrates. In the absence of natural heat, the area of the substrate may be enclosed and heated in order to create a force-cure environment.

3. Under normal circumstances, the ambient-cure coating formula Fluorolast WB200 will cure after approximately 5 to 7 days from the end of application. Again, as with any other coating, ambient cure time projections are dependent upon variable conditions such as: atmospheric temperature, humidity, wind, direct sunlight, etc.

4. 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 metal substrates located outdoors that are exposed to direct sunlight and its infrared heat.

G. Maintenance of Fluorolast WB Coatings

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

2. Hot work (blow torch, welding) should not be performed in/on coated areas unless a heat blanket is used to protect the coating. Fluorolast coatings are formulated to minimize hazards from hot acids and chemicals; not against contact with super high temperature sparks and cinders.

3. Fluorolast WB coatings are formulated to stand up to incidental foot and vehicle traffic along with other potentially abrasive actions. If it is necessary to bring heavy equipment onto the coated area, be cautious to avoid damage to the coating.

4. 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

5. contact Fluorolast before attempting to address those conditions.

H. Repairing Damaged Fluorolast WB small areas

1. In case of damage after the Fluorolast coating has been installed, the coating may be normally repaired with the application of additional coating onto the affected area. By properly preparing the surface and following the procedures already discussed in Section E, the coating will bond to itself.
2. Use a clean cloth dampened with Acetone to wipe the damaged area to clean and liven the surface of the coating. Next, spray on consecutive coats of Fluorolast via the previously described procedure above.

I. Repairing Damaged Fluorolast WB large areas

If a larger area of Fluorolast coating becomes damaged, the company should be made aware of the situation. Any major repairs should be discussed with and approved by Fluorolast in advance.

J. Coating Storage and Shelf Life

The two component WB latex series have a shelf life of six months. However, after the introduction of the catalyst, pot life is then about 10 days for the WB-200 and 30 days for the WB-100 depending upon conditions i.e. temperature, etc. present. Contact Fluorolast for further details.

Due to the high solids content of this product, WB coatings must be agitated weekly while in storage. The easiest way to accomplish this is to (with the lid fully secure) periodically turn the container over (upside down) and allow it to rest on its top (ie. for a few days or a week) then back on its bottom (right side up). Repeat this procedure at regular intervals. This allows the solids to remain dispersed in the solution of water and prevent their settling and compaction.

K. Contacting the Company

Fluorolast is available to assist you 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 or e-mail. Our WEB site address will also contain an abundance of useful information about our coatings: www.fluorolast.com.

Warranty Disclaimer: The manufacturer does not make any representations, nor does it assume any responsibility, as to any other materials or products to which this manufacturer's product will be used or applied, whether in combination with other materials or not; and, therefore the manufacturer disclaims all warranties, express or implied, concerning any particular use of this product, whether used in accordance with directions or not, or for any processes or uses of the product whether disclosed or not. It is the sole responsibility of the user of this product to test for and determine the suitability of this product for any use of the product with any material or combination of materials.