

Ultra-Ever Dry

FREQUENTLY ASKED QUESTIONS (FAQS)

09.16.12



1. What is the working temperature range for Ultra-Ever Dry SE 7.6.110?

Answer: The working temperature range for the product is from -30°F to 300°F (-34°C to 149°C) once it has been applied. It has been effective at temperatures up to 500°F, but we would recommend further testing for any application that will see temperatures above 300°F (260°C).

2. How long will Ultra-Ever Dry coating last?

Answer: Environmental conditions will affect duration and these can vary. Abrasion is the leading cause of reduction in the coating's life. Under non-abrasive, static conditions, you should expect to see many years of outdoor service. Indoor applications will exceed that of outdoor applications.

3. What materials will the Ultra-Every Dry adhere or bond to?

Answer: Almost any material is a candidate for application; steel, aluminum, other metals, plastic, leather, fabric, wood, concrete, etc.

4. How abrasion-resistant is Ultra-Ever Dry SE 7.6.110?

Answer: One of the breakthroughs for this product is its abrasion resistance. The proprietary material provides more abrasion resistance than previous superhydrophobic materials, registering a result of 110 on the Tabor Abrasion Method (ASTM D4060-10). If abrasion is a concern, testing is recommended. If the coating is removed due to abrasion, it can be reapplied by re-spraying.

5. Will the coating still work if the top coat is greatly reduced due to abrasion?

Answer: Yes. In many situations, the super-hydrophobic nature of the material may be diminished but the remaining top coat and bottom coat still provide the functionality of keeping the coated material from getting wet, iced-up or corroding. This is application dependent.

6. How many square feet or square meters can a gallon cover?

Answer: 150 – 180 square feet or 14 -16 square meters.

7. How is Ultra-Ever Dry applied?

Answers: It is sprayed on using air sprayers, pump sprayers or even finger trigger sprayers

8. How long does Ultra-Ever Dry SE 7.6.110 take to cure?

Answer: Generally about 20 - 30 minutes for the bottom coat and 5-10 minutes for the top coat. This can be reduced by applying heat using an oven or an industrial heat gun or blow dryer.

9. What do the terms "superhydrophobic" and "oleophobic" mean?

Answers: Superhydrophobic refers to a coating that exhibits superior water repelling properties that exceeds 150 degrees of contact angle when measuring the sphere of a drop of water on the surface. Ultra-Ever Dry creates an angle of 165-175 degrees. Well-known windshield water repellants are closer to 110 degrees and are only "hydrophobic". Oleophobic refers to the ability to repel oil and other hydrocarbons.

10. What color is the coating?

Answer: The standard product is a translucent white. We do not have a transparent formula at this time. Custom colors are available upon request., minimums may apply. It is recommended to try the coating in an inconspicuous area first if color is important.

11. What is the shelf life of Ultra-Ever Dry and what temperature should it be stored at?

Answer: Typically, shelf life of the product will be one year when stored between 40°F and 90°F (4°C and 32°C).

12. Does UV affect Ultra-Ever Dry.

Answer: SE is resistant to UV between 5-7 years.

13. How chemically resistant is Ultra-Ever Dry?

Answer: As with most materials and coatings, this will depend on the chemical. In general, it is resistant to a wide range including most acids, caustics and refined oils. Testing may be required to ensure proper compatibility.

14. What chemicals will the material not work with?

Answer: Certain solvents, alcohols and soap/detergents will cause the surface of the coating to "wet-out". Once these chemicals are removed, the superhydrophobicity will generally return.

15. Is the coating corrosion resistant?

Answer: Yes, it can improve the corrosion resistance of steel by five to eight times.

16. Is it conductive?

Answer: No, it is non-conductive. It can be safely used to coat electric motors, switches, electrical components, light fixtures, etc.

17. What does this product do to the transmission of vapors (air) through a material?

Answer: The passing of air through the coating is dependent on the substrate. There are surfaces where the coating can act as a liquid repellant under normal pressures, but is porous to any gases or vapor. If the base coat is applied too thick and makes a continuous film across the pores of the substrate, then vapor transmission will be diminished.

18. Is Ultra-Ever Dry flammable?

Answer: Polymer binders do not offer flammability resistance as polymers are carbon-based molecules and therefore will eventually burn or melt. Please note, however, that the coating thicknesses are generally only about 1-2 mils. We expect the overall flammability will be determined by the article being coated. At this time, we would advise application-specific testing if flammability is a concern.

19. Can Ultra-Ever Dry be sprayed on hot surfaces or frozen surfaces?

Answer: Spraying on hot surface may cause solvent in the base coat to dry too fast for an effective coating. At this time, we recommend applying the coating on surfaces up to 150oF (66oC).. We do not have any experience with application on frozen surfaces at this time. We would recommend testing on lower temperatures prior to extensive use. Frozen surfaces will cause adhesion problem, if there is moisture on the surface. Cold surfaces that are free of moisture should not be a problem.

20. Are there environmental or safety concerns during application or after the coating has dried?

Answer: Once dry, there are no known environmental concerns. The coating is found to be safe for use in non-food contacts areas of food processing plants. The coating meets FDA and USDA regulations for those type of applications. When applying the coating, we recommend using gloves and avoiding skin contact as it will dry out the skin. Goggles for eye protection and respirators with P100 pre-filters and organic vapor cartridges are also recommended during the spray-on application.

21. If Ultra-Ever Dry is applied to fabrics, will it wash off?

Answer: Yes, after a few washes. We can provide different binders (bottom coat) to enhance its durability in fabrics upon request.

22. Can you use Ultra-Ever Dry where it is continuously submerged in water or liquid, like the inside of a pipe with constantly flowing liquid?

Answer: No, this is not a good application. The reason the nano-coating relies on a barrier of oxygen/air to form the barrier on the surface of the material it is coating. Unless the coating can become exposed to air every now and then, it cannot "recharge". So coating the inside of continuously flowing pipes is not a prime application. If it is intermittent usage, it may work well. Steel coated with Ultra-Ever Dry has been immersed in salt water for 30 days without any effect.

23. What does the alpha and numerical designation refer to on Ultra-Ever Dry?

Answer: The "SE" refers to the proprietary formula. The digits 7.6.110 indicate its level of hydrophobicity (water repelling) is a 7 out of a scale of 1-8. Its oleophobicity (oil repelling) is a 6 out of 8 and its Tabor abrasion resistance reading is 110.



UltraTech International, Inc.
1-904-854-4334
1-800-764-9566 toll free
1-904-292-1325 fax
info@ultraeverdry.com
www.UltraEverDry.com

11542 Davis Creek Court, Jacksonville, Florida 32256 USA