Like Water off a Duck’s Back, 21st Century Style

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There’s a product out there that is living in fear. Yes, it is quite terrified … of water. It’s so terrified of water in fact that it can’t even stand to be around it. Meet Global Industrial’s semi-magical product, Ultra-Ever Dry, a “superhydrophobic” nano-tech coating that repels water like the world has never seen. It is also “oleophobic”, meaning it repels oils as well.

The first time I saw the promotion video for this product, I could not believe my eyes. In the video, Ultra-Ever Dry is applied to a number of different objects, such as cinder blocks, fasteners, shoes, gloves, metal plates, glass panes, etc. Then the objects are dunked in or splashed with water to show the effect of the coating, which amazingly completely repels all of the water and leaves the object completely dry upon removal from the water. To up the ante, they also perform identical tests with muddy water, paint, oils, wet concrete, with similarly amazing results.

Well, what is it and how does it work? Global Industrial says it repels liquids by creating a barrier of air on the surface, but they don’t go any further, nor do they give away its ingredients. The coating is applied in two parts, with a base coat and a finishing top coat. Global Industrial recommends that protective equipment, such as goggles, gloves, and a respirator be used when applying Ultra-Ever Dry, and they actually sell all the equipment in a kit specifically for applying this product.

It does make one wonder if, like any hyped up product that gets on the market

without knowing its true long term health effects, in a few years we'll see commercials saying "Have you used Ultra-Ever Dry? Call this number." But for now we'll remain satisfied with what we do know.

What is the obvious drawback to such a useful and proprietary product? The cost. The bottom coat is $58 and the top coat is $100, per quart. To bring that to a more industrial sized amount, the bottom coat will run you about $822 and the top coat is about $1,528 for 5 gallons. Assuming a 1 to 1 ratio for the top and bottom coats (I have no idea what the real ratio is), that's about $235 per gallon.

Let's compare that to a few common industrial liquids. Based on some quick internet pricing, that's 9 times more expensive than WD-40, 21 times more expensive than acetone, and 20 times more expensive than ammonia. Ouch!

Despite the price, the number of potential applications for this product are astounding. Corrosion protection, ice prevention, bacteria and mold formation protection, electronics waterproofing, no cleanup mixing of chemicals and cements…the list goes on. Unsurprisingly, people are dreaming up all kinds of uses for this product.

One person on the internet asked if his boat would sink to the bottom of the ocean if he coated his boat in it, assuming that the micro layer of air around the surface would affect the buoyancy of the boat, to which a sales rep assured him it would not sink but that the coating is not meant to be used for constantly submerged objects. Another person asked if it was ok to coat their car windshield to never have to use their wipers again. Yet another person wanted to know the toxicity to see if it was ok to coat his dogs in it.

Whatever the use people find for Ultra-Ever Dry, it seems to be a truly groundbreaking product and I look forward to the opportunity to use it sometime in the future.

What’s your take? Please feel free to comment below! Chris Rendall has a BS in Engineering from UT Austin, graduated with Honors. He is contributing to a book, Smart Building Systems for Architects, Owners, and Builders.

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