Optiguard™ Touch

YOU TOUCH WE PROTECT

PG Data Sheet 32

PERMANENT HIGH PERFORMANCE FOR ALL YOUR DISPLAYS

Overview

Touch the future. The proliferation of interactive technology in our everyday lives means that we come into contact with surfaces more than ever before. Whether at home, work, travel, or leisure we exist in an environment that demands collaboration with a multitude of touch screens, buttons, controls and automation.

Just a simple trip to the shops presents numerous digital surfaces with which we must physically interact - probably more than we are even aware...

At Home
Alarm Clock, Shower, Electric Toothbrush, Oven, Kettle, Tablet, Phone, Security System.

The Journey
Controls, Satnav, Phone, Infotainment System.

The Car Park
Ticket Gate, Pay Machine, Elevator.

The Shopping Centre
Digital Interactive Map, Pay Points, Digital Food Selection Menu.

YOU GET THE IDEA?

Constant interaction presents several challenges. Some practical, some potentially deadly. E.coli and Salmonella (food poisoning) to antibiotic resistant bacteria such as MRSA and VRE thrive in High Touch Point areas. Even if they are not visibly dirty, these places house the most unseen germs and bacteria.

This is why we need a solution.
This is why you need **Optiguard™** Touch

Description

Optiguard™ Touch

- Revolutionary new coating that is scientifically proven to provide all-round protection for High Touch Point (HTP) surfaces.
- Advanced formula that provides a **durable** multi-faceted coating to shield against the adverse conditions of modern life.
- Keeps you safe and eliminates the need for constant disinfection, saving time and money.
- Reliable protection in high traffic areas where durability, cleanliness and safety are essential.
- The **only** all-encompassing solution providing permanent high performance for all your Coverglass, Touch Displays, Fascias, Controls, Soft Buttons and beyond.

Protect your home, business or public space with our cutting-edge coating technology.
Get in touch with us today to learn more and submit your enquiry.

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PROTECTION OF DISPLAYS FOR ELECTRONIC DEVICES

Key Features

Optiguard™ Touch benefits from several key properties, covering all essential elements required for your application.

Optiguard™ Touch is the only surface enhancement coating to provide **ALL** of the following elements:

ANTI-MICROBIAL Reduce bioburden and cross contamination with permanent infection control.

EASY TO CLEAN To aid fingerprint and infection control. Exceptionally easy to clean without harsh chemicals.

CHEMICAL RESISTANT Protects against corrosion and wear from heat, moisture, pH, and electrochemical potentials.

HYDROPHOBIC Superb hydrophobic properties also protect against grease and lipids

ABRASION RESISTANT Protection of substrates in any harsh, high-frequency contact environment.

Typical Applications

Optiguard™ Touch has been developed for use across a variety of industries including **Automotive, Medical, Aerospace, Agriculture, Public Infrastructure, Manufacturing Architectural**.

Optiguard™ Touch is ideal for applications where excellent durability and good hygiene practice is an absolute priority, such as multi-touch point vehicle interiors, public transportation, hospitals, schools and kitchens.

Polycarbonate Test Data

Determination of Antibacterial Activity using Test Based on MOD ISO 22196:2011. Tests conducted by BioLabTests under Certificate Number: BL028/2022 (Copy of Certificate available on request).

		Contact Time*		Reduction against Initial		
Antibacterial Activity	Test Conditions	0 hours	24 hours	Log_{10}	%	Test Standard
Test against MRSA	24 hrs at 35°C under Relative Humidity >90%.	1.45×10^5	≤ 100	≥ 3.16	≥99.94	ISO 22196: 2011
Test against E. coli	24 hrs at 35°C under Relative Humidity >90%.	1.79×10^5	≤ 100	≥ 3.25	≥99.94	ISO 22196: 2011

*Numbers represent Colony Forming Units at representative contcat times.

		Typical Values			
Environmental Exposure	Test Conditions	Coated	Uncoated	Unit	Test Standard
Light Transmittance	Exposure to Relative Humidity 50%, 52°C for 120 hrs	89	88	%	ASTM D-1003
Light Transmittance	Exposure to Relative Humidity 100%, 52°C for 120 hrs	89	88	%	ASTM D-1004
Coating Adhesion	Exposure to Relative Humidity 50%, 52°C for 120 hrs	100	-	-	ASTM D-3359
Coating Adhesion	Exposure to Relative Humidity 100%, 52°C for 120 hrs	100	-	-	-
Yellowing Index Change		0	-	-	ASTM D-1925
Abrasion Tests					
Steel-wool Scratch	Steel-wool rotary test representing severe scratching using a 1.25sq inch #0000 steel-wool pad at 24psi for 100 rotations.	0.4	28.1	Haze	ASTM D-1003
Taber Abrasion	100 cycles with 500gram weight using CS-10F wheels	3-4	32	Haze	ASTM D-1044 / ASTM D-1003
Pencil Hardness	0.75kgs / 7.5N load at Pencil tip at 45°	5	HB	H	ASTM D3363
Chemical Resistance					
Trichloroethylene	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Alcohols	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Ketones	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Petrol	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Diesel	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812

Acrylic Test Data

Determination of Antibacterial Activity using Test Based on MOD ISO 22196:2011. Tests conducted by BioLabTests under Certificate Number: BL028/2022 (Copy of Certificate available on request).

		Contact Time*		Reduction against Initial		
Antibacterial Activity	Test Conditions	0 hours	24 hours	Log_{10}	%	Test Standard
Test against MRSA	24 hrs at 35°C under Relative Humidity >90%.	1.45×10^5	≤ 100	≥ 3.16	≥99.94	ISO 22196: 2011
Test against E. coli	24 hrs at 35°C under Relative Humidity >90%.	1.79×10^5	≤ 100	≥ 3.25	≥99.94	ISO 22196: 2011

*Numbers represent Colony Forming Units at representative contcat times.

		Typical Values			
Environmental Exposure	Test Conditions	Coated	Uncoated	Unit	Test Standard
Light Transmittance	Exposure to Relative Humidity 50%, 52°C for 120 hrs	92	91	%	ASTM D-1003
Light Transmittance	Relative Humidity 100%, 52°C for 120 hrs	92	91	%	ASTM D-1004
Coating Adhesion	Exposure to Relative Humidity 50%, 52°C for 120 hrs	100	-	-	ASTM D-3359
Coating Adhesion	Relative Humidity 100%, 52°C for 120 hrs	100	-	-	-
Yellowing Index Change		0	-	-	ASTM D-1925
Abrasion Tests					
Steel-wool Scratch	Steel-wool rotary test representing severe scratching using a 1.25sq inch #0000 steel-wool pad at 24psi for 100 rotations.	0.4	31.1	Haze	ASTM D-1003
Taber Abrasion	100 cycles with 500gram weight using CS-10F wheels	3-4	26.2	Haze	ASTM D-1044 / ASTM D-1003
Pencil Hardness	0.75kgs / 7.5N load at Pencil tip at 45°	6	1	H	ASTM D3363
Chemical Resistance					
Trichloroethylene	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Alcohols	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Ketones	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Petrol	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812
Diesel	Chemical applied at 15 min intervals for 8 hrs and left for 24 hrs	Pass	-	-	ISO 2812