

400nm

500nm

600nm

700nm

750nm

PERSONAL TECHNOLOGY SYSTEMS

Mobile Devices • Laptops • Keyboards

HIGH PERFORMANCE / UV-CURABLE COATINGS



**Vueguard[®] and Maxguard Anti-Glare Coatings
Improve Wear and Microbial Resistance**





Advantages of Vueguard® Coatings:

- Fast manufacturing cycle times
- Superior abrasion resistance
- Superior chemical & environmental resistance
- Improved yields
- Energy efficient
- Consistent process operating parameters
- Ultra-thin dry film thickness: 6-8 micrometers
- Lower production and processing costs

Best Overall Value – Topcoats

Vueguard® is the “Key” to Keyboard Longevity...

Chemical Resistance Test Results

Chemical Resistance	Uncoated	With Vueguard
Gasoline	X	B
Toluene	X	C
Acetone	X	C
Ethanol	A	A
Trichloroethylene	X	C
5% Ammonia	C	C
10% Sodium Hydroxide	C	C
50% Sodium Hydroxide	X	C
10% Sulfuric Acid	A	A

Common Product Resistance	With Vueguard
Coffee	A
Diet Pepsi®	A
Windex®	A
Hand Soap	A
Chlorox® Bleach	A
Fantastic® Cleaner	A
Hand Cream	A
Ketchup	A
Mustard	A

Chemical Resistance Ratings on ABS Substrate:

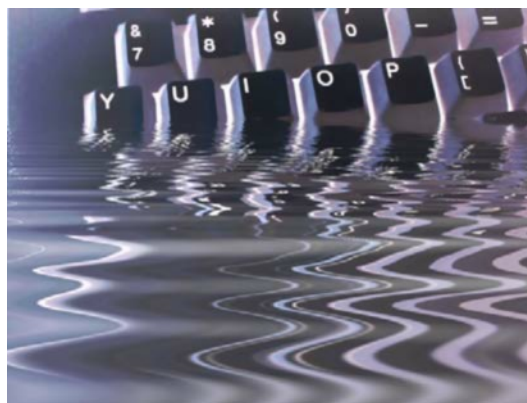
- A – Superior Resistance, Long Term Contact (>24 hrs)**
B – Excellent Resistance, Contact up to 8 hours
C – Good Resistance, Contact up to 1 hour.




Weathering Test Results

Test	Unexposed	Humidity ¹
Haze (ASTM D-1003)	44.2	44.5
Yellow Index Change (ASTM D-1925)	1.0	1.1
Adhesion [%] (ASTM D-3359)	100	100

¹ASTM D-2247 – 250 hrs @ 52°C and 100% RH

Performance Coatings International's Maxguard and Vueguard® coatings dramatically enhance the scratch resistance, wearability and anti-glare properties of personal technology systems. These topcoats are UV-curable, low gloss, hard coating systems providing 100% adhesion on PC, PMMA, ABS, and other substrates.



<p>MAXGUARD 701 AG-5 A</p> <ul style="list-style-type: none"> • Designed for smooth keyboards • Textured hard coating • Primerless • Excellent price & value 	 <p>Keypad Sample – Maxguard® 701 AG-5 A</p>
<p>Adhesion Test (ASTM D-3359): PC, PMMA, ABS: 100% Wear Resistance Test:¹ > 150,000 cycles – No Change ¹ ABS Substrate, 200 grams load @ 30 cycles/min., 38 mm stroke with CS 5 felt tips Steel Wool Scratch Resistance:² 50 psi – No Scratches (PC) ² Rotary test representing severe scratching using #0000 steel wool pad at load, 5 rotations (PC substrate) Pencil Hardness:³ H ³ ASTM D3363 modified (750 grams @ Mitsu-Bishi Hi Uni pencils), (PC Substrate)</p>	
<p>VUEGUARD® 901 AG-5 HP A</p> <ul style="list-style-type: none"> • Designed for smooth keyboards • Soft feel hard coating • Primerless • Outstanding performance 	 <p>Keypad Sample – Vueguard® 901 AG-5 HP A</p>
<p>Adhesion Test (ASTM D-3359): PC, PMMA, ABS: 100% Wear Resistance Test:¹ > 300,000 cycles – No Change ¹ ABS Substrate, 200 grams load @ 30 cycles/min., 38 mm stroke with CS 5 felt tips Steel Wool Scratch Resistance:² 24 psi – No Scratches ² Rotary test representing severe scratching using #0000 steel wool pad at load, 100 rotations (PC substrate) Abrasion Resistance:³ 3.92 ³ ASTM D1044-99 (CS 10 wheels @ 500 cycles at 500 grams loading), (PC substrate)</p>	
<p>VUEGUARD® 901 AG-5 N2 A</p> <ul style="list-style-type: none"> • Designed for ABS keyboards • Suitable for many types of substrates • Textured hard coating • Superior long term scratch resistance 	 <p>Keypad Sample – Vueguard® 901 AG-5 N2 A</p>
<p>Adhesion Test (ASTM D-3359): PC, PMMA, ABS: 100% Wear Resistance Test:¹ > 250,000 cycles – No Change ¹ ABS Substrate, 200 grams load @ 30 cycles/min., 38 mm stroke with CS 5 felt tips Steel Wool Scratch Resistance:² 50 psi – No Scratches ² Rotary test representing severe scratching using #0000 steel wool pad at load, 100 rotations (PC substrate) Pencil Hardness:³ 2H ³ PC Substrate, ASTM D3363 modified (750 grams @ Mitsu-Bishi Hi Uni pencils), (PC substrate)</p>	

Anti- Microbial Report

Test Results

Sample	Number of living bacteria		Antimicrobial activity value against blank	(Antimicrobial efficacy against blank) Reduction %
	At beginning	After 24 hours		
1. Vueguard 901 AG5 HP Blank	1.4 x 10 ⁵	3.0 x 10 ⁷	-----	-----
2. Vueguard 901 AG5HP WPA<10 0.3%	1.4 x 10 ⁵	<1 x 10 ²	>5.4	>99.999
3. Vueguard 901 AG5HP WPA<10 0.6%	1.4 x 10 ⁵	<1 x 10 ²	>5.4	>99.999
4. Maxguard AG3 Blank	1.4 x 10 ⁵	3.2 x 10 ⁷	-----	-----
5. Maxguard AG3 WPA<10 0.3%	1.4 x 10 ⁵	<1 x 10 ²	>5.5	>99.999
6. Maxguard AG3 WPA<10 0.6%	1.4 x 10 ⁵	<1 x 10 ²	>5.5	>99.999
Control (Film only)	1.4 x 10 ⁵	3.7 x 10 ⁷		

The test was executed in accordance with "JIS Z 2801" protocol, by independent lab.

Bacteria used for test: *Escherichia coli* NBRC 3972
Staphylococcus aureus NBRC 12732



FM500193

ISO 9001:2008 Registered



Fully Compliant with EU RoHS Directive 2002/95/EC

Download compliance documentation at www.pcoatingsintl.com

