



**Polylast SurfaceGuard™  
with Microban® Antimicrobial**

**Product Data sheet**

**1. MANUFACTURER**

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*Microban® is a registered trademark  
of Microban Products Company.*



*Polylast Systems, LLC Patent Number  
US 8,389,624 B2 issued March 5, 2013.*

**2. PRODUCT DESCRIPTION**

Polylast SurfaceGuard™ with Microban® Antimicrobial is a 100% recycled crumb rubber surface solution that is seamless, durable, slip-resistant, easy-to-clean, and provides the necessary comfort and safety to help protect humans and animals from dangerous slip-and-falls. Polylast SurfaceGuard™ with Microban® Antimicrobial is made from a proprietary and patented process of combining US primers, binders and finishes to produce a revolutionary new surface solution for livestock, marine, restaurants, veterinarians, roadway repair, golf courses, aviation, hotels and more.

The thickness of the product will depend upon the desired surface: 3/8" or 1/2" or 3/4". The weights for each are as follows: 3/8" weighs 1.7 lbs. per square foot, 1/2" weighs 2.2 lbs. per square foot, and 3/4" weighs 3.3 lbs. per square foot. Polylast comes in 11 different colors; custom colors can be created; logos can be added into the C&S surface options; non-porous, Super Duty, options are available where required. All materials are mixed and poured-in-place, permanently affixed, flooring solutions.

**3. TECHNICAL DATA**

**I. C&S Product (Comfort and Safety)**

●ASTM D2240, Shore A - Hardness, 5 tests, 51.0 – 59.0, Average = 55.6 (±3.0)  
***The Polylast material reduces livestock leg impact concussion and shock by 40%-50% vs. concrete.***

●ASTM D2047, Static Coefficient of Friction  
***The Polylast material meets this standard, thus it has the designation "slip-resistant."***

Test Product	Coefficient of Friction Values (SCOF)	Average (SCOF)
Polylast C&S	0.75, 0.73, 0.78, 0.70, 0.75, 0.74, 0.70, 0.75, 0.72, 0.80, 0.78, 0.79	0.75

Surface must have a Static Coefficient of Friction of 0.50 or greater to be considered Slip-Resistant.

●ASTM F925, Resistance to Chemicals  
***Passed with no change in surface dulling, attack, or color at 60 minutes and 24 hours***  
White Vinegar, Rubbing Alcohol (70%), White Mineral Oil, Sodium Hydroxide (5%), Hydrochloric Acid (5%), Sulfuric Acid (5%), Household Ammonia (5%), Household Bleach (5%), Disinfectant-phenol type (5%), Unleaded Gasoline

**TECHNICAL DATA CONT.**

**C&S Product (Comfort and Safety)**

- ASTM D3389: Abrasion Resistance, Passed with <1.00 gram weight loss  
***The ability of rubber to resist surface wear caused by rubbing contact with another surface or material, i.e., horse shoes, heavy equipment, dirt, sand, traffic,***

<u>Sample No.</u>	<u>Initial Sample Wt. (grams)</u>	<u>Wt. Loss* (grams)/1000 cycles</u>	<u>% Wt. Loss</u>
1	117.9508	.4862	0.41
2	99.5274	.4980	0.50
3	109.3599	.4964	0.45
4	108.9460	.4935	0.46
5	<u>107.6421</u>	<u>.4881</u>	<u>0.45</u>
<b>Average</b>	<b>108.6852</b>	<b>.4924</b>	<b>0.45</b>

\*H-18 Wheels, 1000 gram load/wheel

**II. KCK Product (Kitchen, Clinic, Kennel)**

- ASTM D3389, Abrasion Resistance, Average = 0.417 ±0.023  
***Passed with < 1.00 gram weight loss***

- ASTM F925, Resistance to Chemicals  
***Passed with no change in surface dulling, attack, or color***  
5% Acetic Acid, 70% Isopropyl Alcohol, Mineral Oil, 5% NaOH Solution (Sodium Hydroxide), 5% HCl Solution (Hydrochloric Acid), Household Ammonia, Household Bleach, Lysol Disinfectant, Unleaded Gasoline

- ASTM D2047, Static Coefficient of Friction  
***The Polyplast material meets this standard, thus it has the designation "slip-resistant."***

<u>Test Product</u>	<u>Coefficient of Friction Values (SCOF)</u>	<u>Average (SCOF)</u>
Polyplast KCK	1.0, .98, 1.0, 1.0, 1.0, .99, .99, .98, 1.0, 1.0, 1.0, 1.0	1.0

Surface must have a Static Coefficient of Friction of 0.50 or greater to be considered Slip-Resistant

- ASTM F970, Static Load Testing at 250 psi  
***The Polyplast material meets this standard***

<u>Test Product</u>	<u>Indentation After 24 Hour Recovery (inches)</u>			<u>Average (inches)</u>
	<u>Sample Number</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	
Polyplast KCK	.000	.000	.000	.000

**TECHNICAL DATA CONT.**

**KCK Product (Kitchen, Clinic, Kennel)**

- ASTM E-662, Smoke Density, ASTM E-662, NFPA 258  
**The Polylast material meets this standard.**

<b>Results</b>	<b>Flaming Mode</b>			<b>Non-Flaming Mode</b>		
	1	2	3	1	2	3
Sample No.						
Time to TM (minutes)	7.5	8.6	7.5	20.0	19.8	20.0
Specific Optical Density (Ds)						
1.5 min.	112	168	166	1	1	1
4.0 min	447	476	481	15	13	11
Max. Specific Density (Dm)	552	568	563	257	320	236
Clear Beam	177	199	158	4	5	4
DMC (Corrected Dm)	375	369	404	418	400	387
Average Ds 1.5 min	149				19.9	
Average Ds 4.0 min	468				13	
Average Dm	561				271	
Average Dm (Corrected)	383				267	

It is generally recognized that a material must have an Average Dm (Corrected) value of less than 450 in both the Flaming Mode and Non-Flaming Mode.

- ASTM D412-15A, Tensile Strength, Die C, 20 in/min, Gauge Length: 1.0 inch.

	Sample number	Tensile Strength(psi)	Total Elongation(%)
<b>KCK Sample</b>	<b>1</b>	<b>90.4</b>	<b>42.7</b>
	<b>2</b>	<b>85.7</b>	<b>44.9</b>
	<b>3</b>	<b>89.1</b>	<b>44.8</b>
	<b>4</b>	<b>61.5</b>	<b>42.5</b>
	<b>5</b>	<b>96.3</b>	<b>47.9</b>
	<b>AVG</b>	<b>84.6</b>	<b>44.6</b>
	<b>STDEV</b>	<b>[13.5]</b>	<b>[2.18]</b>

**III. RR Product (Roadway Repair)**

<u>TEST PARAMETER</u>	<u>RESULTS</u>	<u>SPECIFICATION</u>
●ASTM D5329 Tensile Adhesion (Ave of 3) %	155	--
●ASTM D5329 Tensile Strength (Ave of 3), PSI	53.3	--
●ASTM D5329 Non-Immersed Bond @ -29°C, three cycles, 50% extension	PASSED	PASSED 3 CYCLES
●ASTM D5329 Resilience @ 25° C, % Recovery		60 Min
●ASTM D5329 Asphalt Compatibility, no adhesion failure or other deleterious effects	PASSED	PASS

#### **4. INSTALLATION**

All surfaces will be inspected prior to installation and must be clean, smooth, dry, flat, and structurally sound. The installation surface must be free of moisture, sealers, paint, adhesives, solvents, mold, mildew, and any other coatings or films.

All Polylast Surfaces are currently only available for installation by a Certified Polylast Authorized Dealer in accordance with the warranty available on all products and surface solutions. With the exception of pre-packaged retail products, Polylast is hand troweled on concrete, wood, metal, asphalt, or fiberglass only. Dirt or DG (decomposed granite) applications are not available, and are not warranted.

It is recommended that all installations over 1000 square feet have an Installation Agreement signed by both a Polylast representative and the end user or customer.

#### **5. DELIVERY**

All materials will be delivered to the installation location where end user or customer should have a way to unload the product, i.e., forklift, loader, etc. Product should be stored in a dry area protected from the weather on a smooth, flat, dry surface with temperatures maintained between 50° F and 90° F.

#### **6. CARE AND MAINTENANCE**

Diluted solutions of bleach, chlorine, and other cleaning agents can be used with a ratio of 50/50 is recommended. Request ASTM F925 for Chemical Resistance at 60 minutes and 24 hours.

#### **7. AVAILABILITY AND COST**

Polylast products are available only through Certified Polylast Authorized Dealers. For a dealer near you, please contact Polylast at 480-998-3033 or email [info@PolylastSystems.com](mailto:info@PolylastSystems.com).

#### **8. TECHNICAL ASSISTANCE**

Technical assistance may be obtained by contacting Polylast at 480-998-3033, or email [info@PolylastSystems.com](mailto:info@PolylastSystems.com).

#### **9. SAMPLES**

Samples may be obtained by contacting Polylast at 480-998-3033 or email [info@PolylastSystems.com](mailto:info@PolylastSystems.com).

#### **10. MANUFACTURERS LIMITED TEN (10) YEAR WARRANTY**

The Manufacturer's Limited Ten (10) Year Warranty may be obtained by contacting Polylast at 480-998-3033 or email [info@PolylastSystems.com](mailto:info@PolylastSystems.com).

#### **11. MICROBAN® ANTIMICROBIAL TECHNOLOGY**

For more information or questions about Microban® Antimicrobial Technology, please visit the website [www.microban.com](http://www.microban.com) or contact the representative below:

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