Nonstick Coatings for Better Bakeware



Coil and spray applications for consumer bakeware







Consumer bakeware coatings from PPG

At PPG, our mission is to protect and beautify. For consumer bakeware, that means adding not just an eye-catching color, but the durability and safety consumers come to expect from their bakeware.

Our innovations are suitable for a broad range of products and backed by more than 125 years of innovation and a commitment to quality, performance and sustainability that drives confidence in the kitchen.

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Nonstick coatings for better bakeware

Our comprehensive line of Whitford nonstick coatings are available for both coil and spray applications. They offer the unique combination of excellent nonstick performance and durability, available for interior or exterior applications.

Coatings can be developed to meet specific color and visual effects and are available for a range of substrates, all while remaining food-contact compliant.

A global partner with a local presence

Feel confident choosing a partner in PPG who offers you the combination of global solutions and a local presence. All of our coatings have been formulated to meet the strict requirements you face today, with our teams keeping an eye toward the future.

Suggested markets

Consumer Bakeware

Suggested end uses

Bakeware coatings

Application Technologies

Spray

Coil

Unique Benefits

- Made without PFAS coatings available
- Coatings are available in one- or two-coat systems
- Coatings have been developed to provide release for both sweet and savory baking
- Coatings available in a variety of finishes and effects
- Coatings available in either PTFE for coil, a silicon polyester or silicon-based spray coating system



1.

Consumer bakeware coatings

		SPRAY APPLICATION - MADE WITHOUT PFAS*				
		XYLAN®	QUANTUM®	ECLIPSE®	ETERNA® PRO	
	Chemistry	Silicone polyester	Silicone polyester	Silicone polyester	Silicon-based	
	Coating system	1 coat	1 coat	2 coats	2 coats	
Product Characteristics	Product Identifier	8620S	8678S	8688 Primer 8688S Topcoat	86-800 Primer 86-800S Topcoat	
	Availability	Global	Global	Global	Global	
	Continuous Use Temp.	210° C / 410° F	230° C / 446° F	230° C / 446° F	250° C / 482° F	
	Features	One-coat system offering nonstick properties featuring ceramic reinforcement	Higher operating temperature compared to other silicone polyester coatings	Heavily reinforced system	Heavily reinforced system with excellent nonstick properties	
	Benefits	Provides a cost-effective solution with nonstick properties for entry-level products with enhanced abrasion resistance	Allows coating to withstand intense baking demands	Offers increased durability compared to our nonstick coatings	Long-lasting nonstick finish with excellent release performance that is twice that of PPG Eclipse bakeware coating	
Performance	Quality	Good	Better	Better	Best	
	DFT (µm)	14 - 22	15 - 25	20 - 30	20 - 30	
	Reinforcements	Lightly	Moderate	Heavily	Heavily	
	Dry Abrasion cycles	6,000 - 12,000	8,000 - 16,000	30,000 - 45,000	30,000 - 45,000	
	Cake Release Test (Min - Max)	3-5	6-10	6-10	50 - 100	
	BBQ Chicken Test (Min - Max)	3-5	6-10	6-10	15 - 25	
	Steak Test (Min - Max)	2-4	5-8	5-8	10 - 20	
	Overall Migration Test (3% Acetic Acid at 100°C)					
တ	Aluminum	✓	✓	✓	✓	
Substrates	Aluminized Steel	✓	✓	1	✓	
Sub	Carbon Steel	✓	✓	1	✓	
	E.C.C.S.					
Cure	Recommended Cure Profile	275°C / 727°F	288°C/550°F	288°C/550°F	280°C/536°F	
V.O.Cs g/l	≤ 420 (low)					
	> 421 (high)	1	1	1	✓	
uo	Conventional Spray	✓	✓	1	✓	
Application	Electrostatic Spray	1	1	✓	1	
Api	Coil Coating					
Sub- Segment	Interior	✓	1	✓	✓	
	Exterior	1	1	1	1	

	COIL APPLICATION - PTFE						
SKANDIA®	Skandia Xtreme	Skandia Xtreme HR	QUANTANIUM®	XYLAC®			
PTFE	PTFE	PTFE	PTFE	PTFE			
1 coat	2 coats	2 coats	2 coats	1 - 2 coats			
88-732	88-732 Primer 78-780 Topcoat	88-732 Primer 78-785 Topcoat	78-145 Primer 78-355 Topcoat	TBC Primer 46-700 Topcoat			
EMEA + Americas	EMEA + Americas	EMEA + Americas	EMEA + Americas	EMEA + Americas			
230° C / 446° F	230° C / 446° F	230° C / 446° F	230° C / 446° F	230° C / 446° F			
 One-coat system offering nonstick properties NMP non intentionally added 	Excellent release, adhesion and corrosion performance Passes 3x4 hrs Acetic Acid Migration Test NMP non intentionally added	Features a proprietary no- grease system NMP non intentionally added	Extra durable coating with great abrasion resistance	Temperature resistant exterior Wide range of colors and effects available NMP non intentionally added			
 Provides a cost-effective solution for entry-level products Offers NMP NIA alternative for customer requirements 	Offers longer-lasting release life compared to Skandia Offers great permeation resistance Offers NMP NIA alternative for customer requirements	Provides outstanding sweet and savory food release without the need to grease the bakeware after its first use Offers NMP NIA alternative for customer requirements	Designed for longer life during specific roasting applications compared to all <i>Skandia</i> brand coatings	Allows end users to combine with a range of interior coatings to offer a complete system Suits a broad range of aesthetic preferences Offers an alternative for customer requirements			
Good	Better	Best	Best	Better			
5 - 7	7-9	10 - 12	12 - 14	5 - 7 (1 coat) 10 - 12 (2 coats)			
None	Lightly	Lightly	Moderate	None			
< 1,000	7,000	6,000	20,000				
>10	> 20	> 20	> 30				
>10	> 20	> 20	>30				
	3x 4 hours	3x 4 hours	3x 2 hours				
✓	✓	✓	✓	✓			
✓	1	1	✓	1			
✓	✓	✓	✓	1			
>370°C	> 370°C	>370°C	> 370°C	> 370°C			
/	✓	✓	1	✓			
✓	✓	1	1	1			
	I						
✓	✓	1	✓				

^{*} Specially formulated without PFAS as an intentionally added ingredient









PPG: WE PROTECT AND BEAUTIFY THE WORLD®



A trusted global coatings leader

Operations in 70 countries, with 100+ manufacturing facilities and ~50,000 employees



Renowned color expertise

Trend-setting palettes for home, auto and industry paired with unrivaled color matching



Commitment to sustainability

Over 39% of annual sales from sustainably advantaged products and processes



Dedication to innovation

3,500+ technical employees and \$470+ MM average annual R&D investment



Industrial coatings from PPG

- · World-class technical services and training
- Help meeting specific, coatings-related environmental mandates
- Assistance setting up new equipment and identifying areas where your processes may be streamlined
- Troubleshooting production issues
- SECURE LAUNCH EXCELLENCE[™]
 accelerated custom product formulation and color development process

To learn more about PPG coatings, please visit us online at **ppgindustrialcoatings.com**, or contact one of the international sales offices listed below.

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