# 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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### Non-stick coatings for better bakeware

Our comprehensive line of non-stick coatings are available for both coil and spray applications. They offer the unique combination of excellent non-stick 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**

- 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 or a silicon polyester spray coating system
- All coatings are specifically formulated without PFOA





# Applications for consumer bakeware

# Spray

System	Coating Type	Product Name	Availability	Product Identifier	Chemistry	Features >	< Customer benefit		
		XYLAN®	Global	8610S	Silicone Polyester	One-coat system offering nonstick properties	Provides a cost-effective solution for entry- level products		
Solventborne	1 coat	Xylan Global		8620S	Silicone Polyester	One-coat system offering nonstick properties featuring ceramic reinforcement	Provides a cost-effective solution with nonstick properties for entry-level produc with enhanced abrasion resistance compared to <i>Xylan</i> (8610S)		
		QUANTUM™	Global	8678S	Silicone Polyester	Higher operating temperature compared to other silicone polyester coatings	Allows coating to withstand intense baking demands		
		Quantum2	Global	8686 Primer 8686S Topcoat	Silicone Polyester	Moderately reinforced coating	Provides longer wear resistance compared to <i>Quantum</i>		
Solventborne	2 coat	QuanTanium®	Global	8687 Primer 8687S Topcoat	Silicone Polyester	Moderately reinforced coating	Increases durability for extended product life compared to <i>Quantum</i> and <i>Quantum2</i>		
		ECLIPSE™	Global	8688 Primer 8688S Topcoat	Silicone Polyester	Heavily reinforced system	Offers increased durability compared to our nonstick coatings		



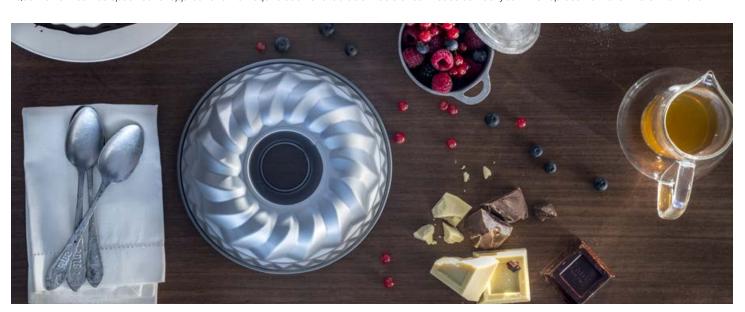
	Performance										wi	VOCs with exempts		Cure		Applio	cation		Sı Segr	ıb nent
Quality	Reinforcement	Dry Abrasion Cycles	Cake Release Test (Min - Max)	BBQ Chicken Test (Min - Max)	Steak Test (Min - Max)		Pressed Aluminum	Aluminized Steel	Carbon Steel		< 420 g/L (low)	≥ 421 g/L (high)		Recommended Cure Profile		Conventional Spray	Electrostatic Spray		Interior	Exterior
Good	None	250 - 1,000	3 - 5	3 - 5	2 - 4		1	1	1			1		275°C / 527°F		1	✓		1	1
Good	Lightly	6,000 - 12,000	3 - 5	3 - 5	2 - 4		1	1	1			1		275°C / 527°F		✓	1		1	1
Better	Moderate	8,000 - 16,000	6 - 10	6 - 10	5-8		1	1	1			1		288℃/ 550℉		1	1		J	1
	T			T	T	1			1	1			1		ı			1		
Better	Moderate	15,000 - 25,000	6 - 10	6 - 10	5 - 8		1	1	1			1		288℃/ 550℉		1	✓		1	1
Better	Moderate	25,000 - 35,000	6 - 10	6 - 10	5-8		1	1	1			1		288℃/ 550℉		1	1		1	✓
Best	Heavily	30,000 - 45,000	6 - 10	6 - 10	5 - 8		1	1	1			1		288°C/ 550°F		1	/		1	1



### Coil

System	Coating Type	Product Name	Availability	Product Identifier	Chemistry	Features >	< Customer benefit
Columbia	looot		EMEA +	88-732	PTFE	One-coat system offering nonstick properties	Provides a cost-effective solution for entry- level products
Solventborne	1 coat	SKANDIA™	Americas	88-732	PIFE	NMP non intentionally added	Provides an alternative to NMP-containing technologies
			EMEA + Americas			Excellent release, adhesion and corrosion performance	Offers longer-lasting release life compared to Skandia
Solventborne		<i>Skandia</i> Xtreme		88-732 Primer 78-780 Topcoat	PTFE	Passes 3x4 hrs Acetic Acid Migration Test	Offers great permeation resistance
	2 coat					NMP non intentionally added	Provides an alternative to NMP-containing technologies
		Skandia Xtreme	EMEA +	88-732 Primer	Hybrid	Features a proprietary no- grease system	Provides outstanding sweet and savory food release without the need to grease the bakeware after its first use
		HR (High Release)	Americas	78-785 Topcoat	System	NMP non intentionally added	Provides an alternative to NMP-containing technologies
						Temperature resistant exterior	Allows end users to combine with a range of interior coatings to offer a complete system
Solventborne	1 or 2 coat	XYLAC™	EMEA + Americas	46-700	PTFE	Wide range of colors and effects available	Suits a broad range of aesthetic preferences
						NMP non intentionally added	Provides an alternative to NMP-containing technologies

<sup>\*</sup>QuanTanium can be specified for applications that require additional abrasion resistance. Please contact your PPG representative for more information.



Performance						Su	bstra	tes	VO wi exer		Cure	Applio	cation	Sı Segr	ub nent
Quality	Reinforcement	Dry Abrasion Cycles	Cake Release Test EN 13834 Annex C (Min - Max)	Steak Release Test EN 13834 Annex D (Min - Max)	Overall Migration Test with 3% Acetic Acid at 100°C	Rolled Aluminum	Aluminized Steel	E.C.C.S.	< 420 g/L (low)	≥ 421 g/L (high)	Recommended Cure Profile	Conventional Spray	Coil Coating	Interior	Exterior
Good	None	< 1,000	10+	10+		1	1	1		1	> 370°C / 698°F		1	1	
Better	Light	7,000	20+	20+	3x 4 hours	1	V	V		V	> 370°C / 698°F		<i>y</i>	1	
Best	Light	6,000	20+	20+	3x 4 hours	1	1	1		1	>370°C/ 698°F		<b>√</b>	1	
Better	None	N/A	N/A	N/A	N/A	1	1	1		1	> 370°C / 698°F		1		✓ <b> </b>













### PPG: WE PROTECT AND BEAUTIFY THE WORLD®



# A trusted global coatings leader

Operations in 75+ 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 38% of annual sales from sustainably advantaged products and processes



# Dedication to innovation

3,500+ technical employees and \$463 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<sup>™</sup> 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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