# 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.

## **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

## Suggested markets

Consumer Bakeware

## Suggested end uses

Bakeware coatings

## **Application Technologies**

Spray

Coil





# 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	1coat	Xylan Global		8620\$	Silicone Polyester	One-coat system offering nonstick properties featuring ceramic reinforcement	Provides a cost-effective solution with nonstick properties for entry-level products 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									VOCs with exempts		Cure	
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)	≥ 421g/L (high)	Recommended Cure Profile	
Good	None	250 - 1,000	3 - 5	3 - 5	2 - 4		1	1	1		1	275°C / 527°F	
Good	Lightly	6,000 - 12,000	3 - 5	3 - 5	2 - 4		1	1	1		1	275°C/ 527°F	
Better	Moderate	8,000 - 16,000	6 - 10	6 - 10	5 - 8		1	1	1		1	288℃/ 550℉	
Better	Moderate	15,000 - 25,000	6 - 10	6 - 10	5 - 8		✓	1	1		/	288℃/ 550°F	

Moderate

Heavily

Better

Best

25,000 - 35,000

30,000 - 45,000

6 - 10

6 - 10

6 - 10

6 - 10

5 - 8

5 - 8

with npts	Cure	Applio	cation	Sı Segi	ıb nent
≥ 421g/L (high)	Recommended Cure Profile	Conventional Spray	Electrostatic Spray	Interior	Exterior
1	275°C / 527°F	1	1	1	1
1	275°C/ 527°F	1	1	1	1
J	288°C/ 550°F	J	J	1	1
1	288℃/ 550℉	1	1	1	1
1	288°C / 550°F	1	1	1	1

288°C/ 550°F



# Coil

System	Coating Type	Product Name	Availability	Product Identifier	Chemistry	Features >	< Customer benefit		
Solventborne	1 anot	SKANDIA®	EMEA +	88-732	PTFE	One-coat system offering nonstick properties	Provides a cost-effective solution for entry- level products		
Solventborne	1 coat	SKANDIA	Americas	00-732	PIFE	NMP non intentionally added	Offers an alternative for customer requirements		
			EMEA . TRC Primer			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	TBC Primer 46-700 Topcoat	PTFE	Wide range of colors and effects available	Suits a broad range of aesthetic preferences		
						NMP non intentionally added	Offers an alternative for customer requirements		
			EMEA + Americas	88-732 Primer 78-780 Topcoat		Excellent release, adhesion and corrosion performance	Offers longer-lasting release life compared to Skandia		
		<i>Skandia</i> Xtreme			PTFE	Passes 3x4 hrs Acetic Acid Migration Test	Offers great permeation resistance		
						NMP non intentionally added	Offers an alternative for customer requirements		
Solventborne	2 coat	Skandia Xtreme HR (High	EMEA + Americas	88-732 Primer	PTFE Silicone	Features a proprietary no-grease system	Provides outstanding sweet and savory food release without the need to grease the bakeware after its first use		
		Release)	Americas	78-785 Topcoat		NMP non intentionally added	Offers an alternative for customer requirements		
		QuanTanium	EMEA + Americas	78-145 Primer 78-355 Topcoat	PTFE	Extra durable coating with great abrasion resistance	Designed for longer life during specific roasting applications compared to all <i>Skandia</i> brand coatings		



	Performance						Su	bstra	tes	VOCs exer	with npts	Cure	Applic	ation	Sı Segr	ıb 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)	≥ 421g/L (high)	Recommended Cure Profile	Conventional Spray	Coil Coating	Interior	Exterior
Good	None	< 1,000	10+	10+			1	1	1		s	> 370°C / 698°F		1	1	
Better	None	N/A	N/A	N/A	N/A		V	1	<b>√</b>		✓	> 370°C / 698°F		J.		V
Better	Light	7,000	20+	20+	3x 4 hours		1	1	✓		<b>√</b>	> 370°C / 698°F		<b>√</b>	✓	
Best	Light	6,000	20+	20+	3x 4 hours		1	J	1		1	> 370°C / 698°F		✓	1	
Exceptional	Moderate	20,000	30+	30+	3x 2 hours		1	1	1		1	> 370°C / 698°F		1	1	













## PPG: WE PROTECT AND BEAUTIFY THE WORLD™



## A trusted global coatings leader

Operations in 70 countries, with 150+ manufacturing facilities and 70.000+ employees



#### Renowned color expertise

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



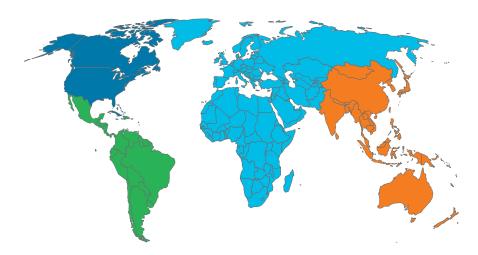
## Commitment to sustainability

Over 30% 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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