Nonstick coatings for a more colorful kitchen



Sol-Gel and PTFE technology for consumer cookware







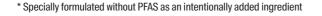
Consumer coatings from PPG

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

Our innovations are suitable for a broad range of products and backed by more than 135 years of innovation and a commitment to quality, performance and sustainability that drives confidence in the kitchen.

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Imagine the possibilities

Our comprehensive line of Whitford nonstick coatings are available in a range of options for consumer cookware applications. They offer the unique combination of excellent nonstick performance and durability, available in both PTFE and Sol-Gel technology that is made without PFAS substances.

Coatings can be developed to meet specific color, texture and visual effects, 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

- Made without PFAS coatings available
- Coatings are available in two- or three-coat systems
- · Select coatings include unique additives or reinforcements for added durability
- Many coatings are metal utensil- and/or dishwasher-safe
- Select coatings have been developed with unique properties including the ability to heat more evenly

Suggested markets

Consumer Cookware

Suggested end uses

Cookware coatings

Application Technologies

Spray

Roller



Nonstick coatings for consumer cookware

		MADE WITHOUT PFAS*					
		FUSION™	Fusion HR	Fusion PRO			
Product Characteristics	Chemistry	Sol-gel	Sol-gel	Sol-gel			
	Coating system	2 coats	2 coats	2 coats			
	Product Identifier	8088 Primer 8089 Topcoat	80-188 Primer 80-189 Topcoat	80-288 Primer 80-289 Topcoat			
	Availability	Global	Global	Global			
	Features	Hard, durable non-stick surface	Great overall durability	Long-lasting, non-stick release			
	Benefits	Offers improved wear resistance compared to entry-level PTFE coatings	Improved performance, thermal resistance and release vs. standard <i>Fusion</i> coatings	PPG lab tested to last twice as long as comparable sol-gel coatings			
	Quality	Good	Better	Best			
	DFT (μm)	30-55	30-55	30-55			
g)	Wet Abrasion cycles	30,000 - 50,000	10,000 - 30,000	> 50,000			
Performance	HFT / Scratch	NA	NA	NA			
Perfor	Life cycle release**						
	Accelerated Dishwashing Simulation Test***	>4 cycles	>10 cycles	>20 cycles			
	Thermal Shock Test	>4 cycles	>10 cycles	>15 cycles			
	Rolled Aluminum	✓	✓	✓			
ss	Forged Aluminum	1	1	1			
Substrates	Cast Aluminum	1	1	1			
Sul	Hard Anod. Aluminum	✓	1	✓			
	Stainless Steel	✓	1	✓			
Cure	Recommended Cure Profile	280-330°C / 536-625°F	280-330°C / 536-625°F	280-300°C / 536-572°F			
S	≤ 420 (low)						
V.O.Cs g/l	> 421 (high)	1	1	1			
ation	Conventional Spray	/	/	1			
Application	Rollercoat						
onts	Interior	/	/	1			
Sub- Segments		+	-				
Suk	Exterior						

* Specially formulated without PFAS as an intentionally added ingredient
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		Cla	assic PTFE Waterborne		
SKANDIA™ Xtreme	XYLAN® Plus		QUANTANIUM®	ECLIPSE™	ETERNA™
PTFE	PTFE		PTFE	PTFE	PTFE
1 Primer coat 1 Midcoat 3 Topcoats	2 coats		3 coats	3 coats	2 coats
7610 Primer 7620 Midcoat 7630 Topcoat	8255 Primer 8257 Topcoat	8294 Primer 8253 Topcoat	7141 Primer 7242 Midcoat 7343 Topcoat	7151 Primer 7252 Midcoat 7353 Topcoat	71-050 Primer 73-353 Topcoat
Global	EMEA	APAC	Global	Global	Global
Roller coating system with high release	Low-cost coating available for use in a wide range of applications		Titanium reinforced coating with high abrasion resistance and release	High abrasion resistance	Our longest-lasting non- stick coating
Allows for added durability in post-formed, cost-driven cookware	Provides nonstick properties at a competitive application cost		Offers improved performance compared to <i>Xylan</i> at a midrange price point	Offers great resistance to scratches, wear and damage	Provides excellent release over the life of the coating
Good	Good		Better	Best	Best
20-25	20-30		30-40	40-50	35-45
2,000 - 10,000	500 - 8,000		15,000 - 25,000	30,000 - 60,000	10,000 - 25,000
3-4	3-4		6-8	8-10	5-8
500 - 5,000	1,000 - 8,000		10,000 - 25,000	25,000 - 60,000	35,000 - 70,000
√	✓		✓	✓	✓
✓	/		1	1	✓
✓	✓ ✓		✓ ✓	✓ ✓	<i>y</i>
	<i>J J</i>		<i>J J</i>	<i>J J</i>	<i>y y y</i>
	✓ ✓		✓ ✓	✓ ✓	<i>y</i>
✓	<i>J J</i>	5-780°F	<i>J J</i>	<i>J J</i>	<i>y y y</i>
✓ 400-425°C / 750-798°F ✓	<i>J J J</i>	5-780°F	<i>J J J</i>		✓ ✓ ✓
√ 400-425°C / 750-798°F	✓ ✓ ✓ ✓ 380-415°C / 715	5-780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F
√ 400-425°C / 750-798°F	✓ ✓ ✓ ✓ 380-415°C / 715	5-780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F
√ 400-425°C / 750-798°F	✓ ✓ ✓ 380-415°C / 715	5-780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F
✓ 400-425°C / 750-798°F ✓	✓ ✓ ✓ 380-415°C / 715	5-780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F	✓ ✓ ✓ 415°C / 780°F

^{**} Internal Test 165N score

3.

 $^{^{\}star\star\star}$ One accelerated dishwashing cycle represents approximately 50 standard dishwashing cycles









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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