

EXCILON[®] PRODUCT BROCHURE (PFAS)

Focus on Ceramic Coating Technology for 20 Years





Shanghai Excilon New Materials Co., Ltd.

GLOBAL 500+ BRAND PARTNERS





Beijing Olympic Torch Designated Paint Supplier



COMPANY PROFILE

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EXCILON PARTNERS



COMPANY PROFILE

Shanghai Excilon, established in 2003, has always stood at the forefront of the field of ceramic coatings. We focus on R&D, Production and Sales of water-based ceramic coatings. It has excellent performance and characteristics, which has been widely recognized by the customers and market. Our innovation is not only reflected in the technical aspect which has 47 invention patents authorized, but also reflected in the application aspect, as the first supplier in China who introduced ceramic technology to cookware, bakeware, aluminum panel, wall paint, and brought new possibilities to whole industry. Excilon is a pioneer in ceramic coating industry, and commits to providing leading products, professional solutions and services, to creating added-value for customers, to invigorating vitality into the industry development

Culture



Vision

A healthy life and a beautiful environment are inseparable from new material technology



Values

Integrity, Embrace & Drive Change,
Results-Oriented, Deliver Solutions for Success



Mission

Create win-win opportunities for customers, employees, partners, and investors through the development and application of new materials

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2023

Annual Production Capacity Exceed 10,000 Tons

Lay the foundation of Excilon to become the industry leader worldwide

EXCILON HISTORY

2007

Designated Coating for Beijing Olympic Torch

Stood out from 200 competitors and become an official supplier for 2008 Beijing Olympic Games

2009

Ceramic Coatings Launched for Non-stick Cookware Application

Become the industry pioneer to enter the Chinese cookware

2013

"Shanghai Technical Little-Giant Enterprise" Awarded

Become the 1st awarded coating company in Shanghai

2004

Ceramic Coatings Launched for Stove Application

Become the industry pioneer to enter the Chinese stove market

2011

"National high-tech Enterprise" Awarded

Become the 1st National High-Tech Enterprise in ceramic coating industry

2014

Ceramic Coatings Launched for Aluminum Facade Application

Become the industry pioneer to enter the Chinese aluminum facade market

2020

2015

Listed on new OTC

market in China

Stock Code: 831819

Ceramic Coatings Launched for Wall & Ceiling Application

Become the industry pioneer to enter the Chinese Wall & Ceiling paint market

2003

Shanghai Excilon Established

Become the 1st ceramic coating supplier in China







excilon

3rd Generation Excilon 2150

Diamond Technology

1st Generation Excilon 2000 Sol-Gel Technology

Item	2000 Series 2050 Series		2150 Series	
Gloss(60°)	≥50			
Hardness		≥8H		
Adhesion		≤Grade 2		
Abrasion Resistance	≥10000 cycles	≥20000 cycles	≥30000 cycles	
LGA	≤3 Satisfied			
Non-stick Durability	≥100 eggs ≥200 eggs		eggs	
Non-stick after Carbonization	≥10 cycles ≥20 cycles		cycles	
Non-stick after Heating	≥5 cycles ≥20 cycles			
Non-stick after Abrasion	≥1000	≥2000	≥6000	

COOKWARE COATING EXTERIOR





Item	2070 Series	2170 Series	
Gloss(60°)	≥50		
Hardness	≥{	ВН	
Adhesion	≤Grade 2		
Acid Resistance	No cracks, wrinkles, discoloration		
Alkali Resistance	No cracks, wrinkles, discoloration		
Abrasion Resistance	≥10000 cycles		
Stain Clean	≥5 cycles	≥25 cycles	
Dishwasher Safe	≥30 cycles		





COOKWARE COATING SCREEN PRINT APPLICABLE



Common Screen Pattern Examples



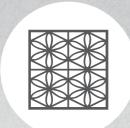














Item	2060 Series	2660 Series	
Gloss(60°)	≥40		
Hardness	≥8H		
Adhesion	≤(Grade 2	
Acid Resistance	No cracks, wrinkles, discoloration		
Alkali Resistance	No cracks, wrinkles, discoloration		
Abrasion Resistance	≥10000 cycles		
Non-stick after Heating	≥3 cycles	≥8 cycles	
Dishwasher Safe	≥30 cycles	≥50 cycles	
Screen Print	Yes		

STOVE COATING











Liquid Tray









R	oasting Box
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Item	5000 Series	5010 Series
Gloss(60°)	≤40	
Pencil Hardness	≥8	ВН
Adhesion	≤Gra	ade 2
Thermal Shock	No cracks, wrinkles	
Combustion Resistance	No disco	bloration
Pigment Limit Combustion Resistance	1000°C	700°C

Item	5020 Series	5030 Series	5040 Series	5320 Series
Gloss	≥50			
Hardness		≥	8H	
Adhesion	≤Grade 2			
Abrasion Resistance		≥10000 cycles	CHECK COORD IN CASE	≥20000 cycles
LGA	≤3 Satisfied ≤2		≤2.5 Satisfied	
Scratch Resistance	Slight Scratch No Scratc			No Scratch
Non-stick after Heating	≥10 cycles			
Stain Clean	≥5 cycles			
Anti-bacteria		≥99.9%		1
Appearance		1001	Stone-like	1

ELECTRIC COATING



Item	8000 Series	8030 Series	8040 Series	8050 Series
Gloss	≥50			
Hardness		≥{	8H	
Adhesion	≤Grade 2			
Abrasion Resistance	≥10000 cycles			
LGA	≤3 Satisfied			
Non-stick Durability	≥100 eggs ≥10 e		≥10 eggs	
Boiling Resistance	≥120h ≥400h		≥120h	
Thermal Shock	≥10 cycles			
Anti-bacteria	1	≥99.9%	1	1
Single Layer		1	1	Yes

Item	8100 Series	8130 Series
Gloss	≥5	50
Hardness	3≤	ВН
Adhesion	≤Gra	nde 2
Abrasion Resistance	≥50000 cycles	
LGA	≤3 Satisfied	
Non-stick Durability	≥100 eggs	
Non-stick after Heating	≥3 cycles	
on-stick after Carbonization	≥10 cycles	
Anti-bacteria	1	≥99.9%

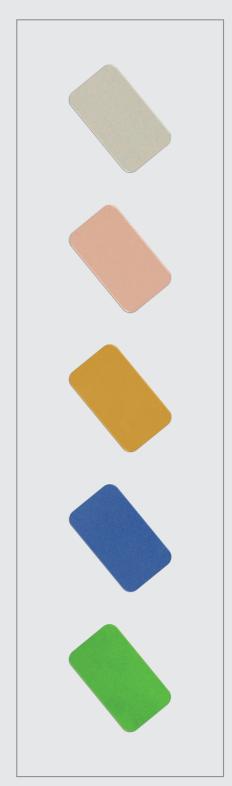
PERFORMANCE TEST METHOD

Item		Test Method Description
Gloss		GB/T 9754 Gloss Measurement (60°)
Hardness	The state of the s	GB/T 6739 Pencil Hardness
Adhesion		GB/T 9286 Cross-cut Test
Abrasion Resistance		GB/T 32095.2 Flat Abrasion Test 3M7747C Scotch-Brite replaced each 500 cycles, 0.5% detergent solution, 3KG downward force
LGA		2 PFG-Q 1384 LGA Test
Non-stick Durability		Q/SHYCL 005 Non-stick Test 190~210°C, fry eggs without edible oil
Non-stick after Carbonization		Q/SHYCL 005 Non-stick Test after Carbonization Each cycle fill the workpiece with milk, heat it until the milk is completely carbonized, and rinse with water
Non-stick after Heating		Q/SHYCL 005 Non-stick Test after Heating Baking at 300°C for 30 mins, then fry 10 eggs at 160~180°C without edible oil
Non-stick after Abrasion		Q/SHYCL 005 Non-stick Test after Abrasion 3M7747C Scotch-Brite replaced each 250 cycles, 0.5% detergentsolution, 1.5KG downward force Fry 3 eggs without oil after every 1000 abrasion cycles
Acid Resistance	The spay safe and	Q/SHYCL 005 Acid Resist Test Inject 5% acetic acid solution into the sample, when the liquid level is more than 2/3 of the height of the sample, cover the pot and observe the coating after 24 hours
Alkali Resistance	an and and	Q/SHYCL 005 Alkali Resist Test Inject boiling 20% sodium carbonate solution into the sample, when the liquid level ismore than 2/3 of the height of the sample, observe the coating after 2 hours

Item	 Test Method Description
Exterior Stain Clean	Q/SHYCL 005 Exterior Easy Clean Test Heat up the cookware to 350°C, and quickly pour the mixture (10% salt, sugar, Vinegar, soy sauce) on the outer wall surface. Once it dried, rinse it with water and clean with cotton cloth
Dishwasher Safe	Q/SHYCL 005 Dishwasher safe Test Place in the dishwasher and add detergent, set cookware washing model, check after each cycle
Cake Stripping	Q/SHYCL 005 Cake Stripping Test Use the cake mix, bake at 180-230°C for 25-30min, then turn and release the mold without cleaning, and each cycle continues after wiping
Non-stick after BBQ	Q/SHYCL 005 BBQ Test Each cycle place a piece of beef or chicken steak in and bake it at 180 °C, and then remove steak without adhesion and coating has no discoloration
Combustion Resistance	Q/SHYCL 005 Combustion Test Observe the discoloration after continuous burning for 1h
Pigment Limit Combustion Resistance	Q/SHYCL 005 Limit Combustion Test Observe the discoloration after continuous burning with a high-temperature firegun for 1min
Thermal Shock	Q/SHYCL 005 Thermal Shock test Each cycle heat to 300°C, and then rinse with tap water to room temperature
Scratch Resistance	Q/SHYCL 005 Scratch Resistance test Wipe with a steel ball or 3M7747C Scotch-Brite and observe the coating
Interior Stain Clean	Q/SHYCL 005 Interior Stain Clean Test After soda wash and dry, bake at 300 °C for 20 minutes. Draw with marker and wipe clean for 1 cycle
Boiling Resistance	Q/SHYCL 005 Boiling Test Boil demi water and observe the coating
Anti-bacteria	GB/T 21866 Anti-bacteria Test Quantifications of E. coli and Staphylococcus aureus were introduced, and the remaining colonies were tested after a period of time

COLOR TREND

Excilon water-based ceramic coating not only has excellent performance but also rich color, which can meet the decorative needs of different occasions







TEST REPORT























PROCESS EXCELLENCE



G60 New Materials Industry Research Center

Academician

2

Employees

PhD

100

Employees

Coverage of key kitchenware manufacturers:

Zhejiang province: 92%

Guangdong province: 76%

Other provinces: 60%

MSc

16

Employees

Service Concept



Accurate Sample



Stable Quality



Excellent Performance



Fast Response



Prompt Delivery



Satisfying Experience

25

Employees

Lab area

3000

 m^2

EXCILON PARTNERS





