COCKVARDER



XERA-DUR

Selected raw materials - ideally combined. The result: REVOLUTIONARY!

"Progress is not the result of wait and see, but comes about through innovative development". According to this credo ILAG presents a revolutionary new technology for ceramic coatings with extraordinary properties.

- **Considerably improved heat resistance of the non-stick effect** Even repeated overheating to 300 °C [572 °F] hardly affects the non-stick effect
- 2 Considerably improved and longer lasting non-stick effect Tested with a specially adapted egg test for ceramic coatings and with an intensive chicken wing test
- 3 Considerably improved stain resistance even when burning food Tested with an intensive stain test containing sugar, tomatoes and milk
 - Improved corrosion resistance Saltwater cooking test and dishwasher test
- **Abrasion resistance on a constant high level** According to the abrasion test of TÜV/LGA



Results from laboratory testing at ILAG

The outstanding non-stick effect in new condition (aha-experience for customers) weakens rapidly with the daily use. Extensive laboratory tests have shown that a temperature load to 200 °C [392 °F] hardly impairs the quality and the long-term non-stick performance. That means that the non-stick effect remains almost unchanged even after cooking many eggs and a variety of chicken wings.

However, the non-stick effect will be quickly reduced if the coating is repeatedly exposed to higher temperatures. Temperatures around 220 – 250 °C [428 – 482 °F] are normal for everyday cooking on the stove and will lead to a rapidly reduced non-stick effect, even though these temperatures are below overheating.

That is why we have developed the new XERA-DUR technology.

This **brand new technology** for ceramic coating combines the properties of carefully selected raw materials and distinguishes itself with remarkable characteristics. The result is the creation of a **new, denser XEROGEL**.

The dense Xerogel with intensely anchored heat-resistant non-stick donors has been able to significantly increase the quality and long-life cycle.



Test method



With the development of XERA-DUR the preservation of non-stick effect was significantly improved, even under high temperatures stress.

To check the excellent properties, we have performed the following test methods:

Egg test

The pan is heated for 3 minutes at 300 °C [572 °F], thereafter to frying 10 eggs (only egg white). Then the pan is heated again for 30 minutes at 300 °C [572 °F] and another 10 eggs white fried. This test cycle is repeated until the non-stick effect destroyed. The test is terminated when the protein is no longer released from the pan 2 times in a row.

Chicken wings test

Chicken wings, which are marinated with one teaspoon of soy sauce, are placed at 235 °C [455 °F] in a coated XERA-DUR pan. Each side of the wing will be fried 2 times 2.5 minutes, 10 minutes total. The test is repeated 20 times – and the results are astounding.

The new durable XERA-DUR non-stick coating shows almost no discoloration, with even better non-stick effect and significantly improved durability characteristics.

	Egg test		Chicken wing test	
	Amount of eggs (only egg white)	Number of repetitions at 300 °C [572 °F] temperature stress	Occurrence first discoloration	Intensity of discoloration after 20 cycles
Standard ceramic coatings	1 – 12 pc.	1 – 2 times	1 – 3 times	Very strong
Ceralon, 2-coat	21 – 55 pc.	2 – 4 times	3 – 5 times	Considerable
XERA-DUR, 2-coat	42 – 60 pc.	5 – 6 times	6 – 14 times	Slight discoloration visible
XERA-DUR, 1-coat	80 - 150 pc.	8 – 15 times	8 – 15 times	Discoloration very low to barely visible

Note: the results are highly dependent on the color used and the application of the coating and may vary accordingly.

The results speak for themselves.

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With the development of XERA-DUR, the preservation of the non-stick effect has been significantly improved, even under high temperature stress.

XERA-DUR – the improved ceramic non-stick coating for a long-term success

XERA-DUR



XERA-DUR (1-coat)

Exceptional one coat system, which is characterized primarily by an excellent long-term non-stick effect at chicken test. For improved networking and layer thickness, the following should be carried out: application of the one coat Xerogel system. As soon as the first layer has slightly dried, a second layer is applied upon the first layer (same material).



XERA-DUR (2-coat)

Two coat system on Xerogel base with good results in the heat resistance at 300 °C [572 °F]. The two layer XERA-DUR system combines excellent abrasion as well as corrosion resistance.

Number of layers		1	2	
Coating thickness µm [mils]		40 - 50 [1.57 - 1.96]	40 - 50 [1.57 - 1.96]	
Curing temperature °C [F]		250 [482]	250 [482]	
A	lu			
Cast a	lu			
Stainless ste	el			
Repeated heat resistance up to 300 °C [572 °F]		****	****	
Egg test 300 °C [572 °F]		****	****	
Stain resistan	e	* * * *	****	
Long-term non-stick (chicken test)		****	* * * *	
Abrasion (LG	Abrasion (LGA) good		good	
Corrosion resistance (saltwater)		* * * *	* * * *	

ILAG coatings applicated in the right way can be used for food contact materials according to the European legislation.

highly recommended conditionally recommended





XERA-DUR® (1-coat)

 Ceramic-reinforced Xerogel layer for longterm non-stick effect , ideally, wet-on-wet, applied in two applications.





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XERA-DUR® (2-coat)

① High quality Xerogel top coat with metallic effect② Ceramic-reinforced Xerogel base layer

Sandblasted substrate surface



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