

IO-Hybrid
Technology

BASF
We create chemistry

Col.9[®] 7671

IO-Hybrid technology with excellent DPUR



Col.9[®] 7671

Keeps facades looking fresher for longer

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Technology

High density organic/inorganic chemical bonded hybrid networks that brings about excellent adhesion, improve film formation resulting in high water whitening resistance and hydrophilic surface for excellent DPUR.

Advantages

Exceptional dirt pick-up resistance

Outstanding stability, easy to formulate

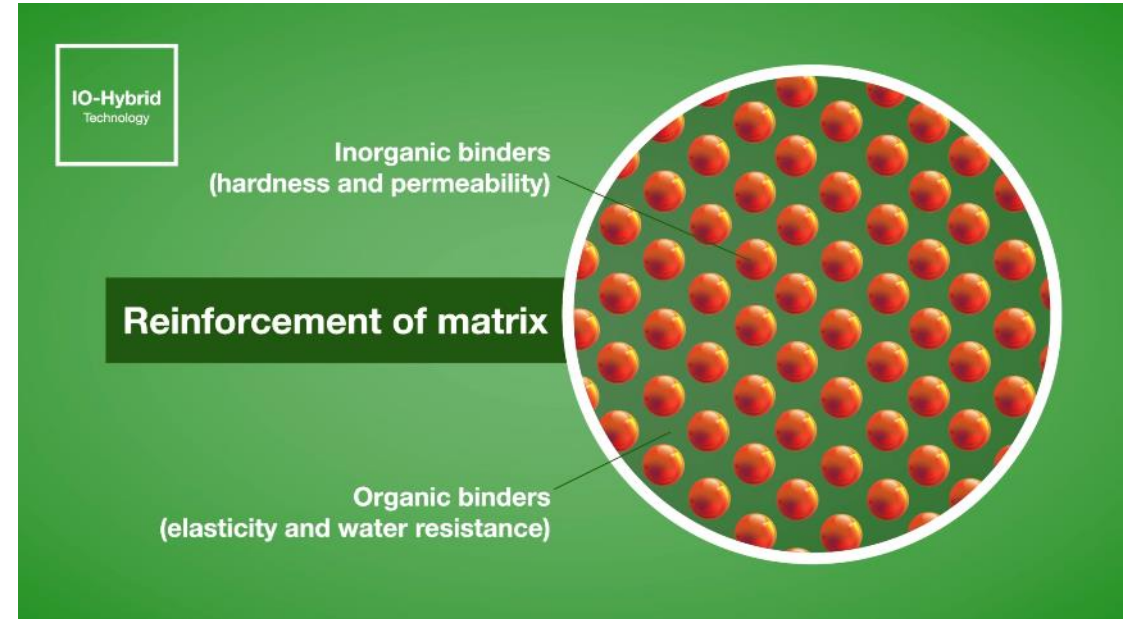
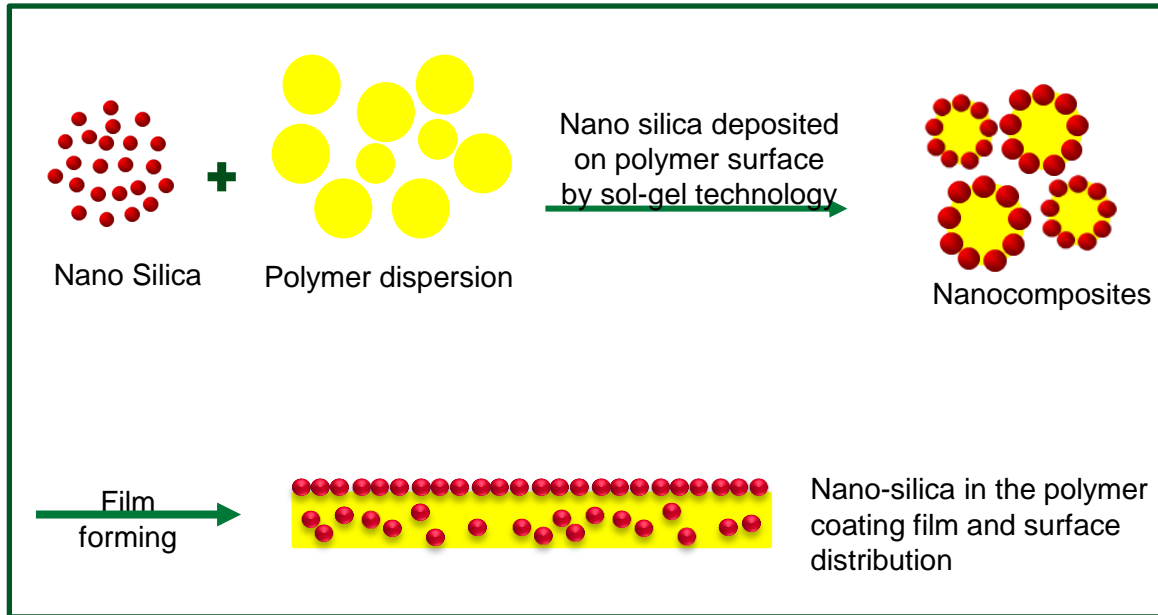
Outstanding water whitening resistance

Good hardness

APEO-free

IO-Hybrid technology with excellence DPUR - Make exterior wall stay clean and fresh for a long time

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- Inorganic/organic hybrid technology impact super hydrophilic surfaces to achieve **SUPERIOR DPUR**, keeping exterior wall looking fresh and clean
 - Inorganic Binder - hardness & permeability
 - Organic Binder - Elasticity & water resistance

**Poor Dirt Pick up Resistance (DPUR)
will cover everything....**

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Col.9[®] 7671

**High DPUR
Exterior Surface Modifier**

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Dispersion properties

Dispersion type	Anionic
Solid content	ca. 32 %
pH value	ca. 9 – 10
Average particle size	ca.100 nm
MFFT	ca. 10° C
Specific gravity (wet polymer)	ca. 1.12 g/cm ³

Ingredient Dosage Description

Water	353.5	
Rheovis HS1212	5	HASE thickener, BASF
Ammonia	1	pH adjuster
Texanol	4.5	Coalescent, Eastman
Acticide MV	1	Biocide, Thor
PG	10	
Col.9 7671	625	
	1000	

Test standard

HG/T 5065-2016 Finishing varnishes for Architectural Coatings

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	Item	Requirements
1	State in the container	After mixing, no lumps, in a uniform state
2	Transmittance/% \geq	90
3	Low temperature storage stability	No degenerate
4	Foggy/%	To be agreed
5	Application	barrier-free
6	Drying time /h \leq Surface dry Hard work	1
		24
7	Appearance of film	Normal
8	Water resistance (96h)	No abnormality
9	Acid rain resistance (48h)	No abnormality
10	Alkali resistance	48hNo abnormality
11	Temperature resistance of film (3 cycles)	No abnormality
12	Scrub resistance (2 000次)	The paint film is not damaged
13	Dirty pick-up resistance/% \leq (White paint)	15
14	Artificial aging (white paint) Chalking/Class \leq Color change/Class \leq Gloss lost %/Class \leq	1000hNo blistering, no peeling, no cracks
		0
		2
15	Adaptability to the underlying coating	Pass

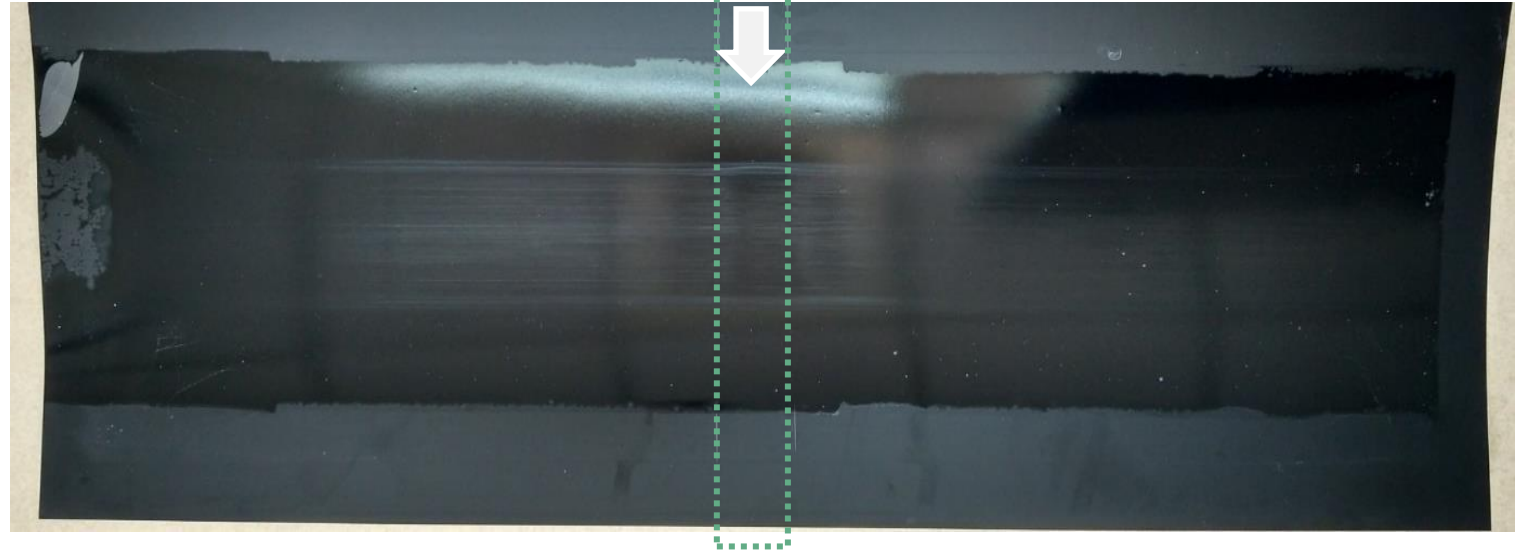
Col.9[®] 7671 for clear topcoat Stability test and Scrub resistance

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50°C, 15days

- Clear topcoat based on Col.9[®] 7671 performs outstanding stability.



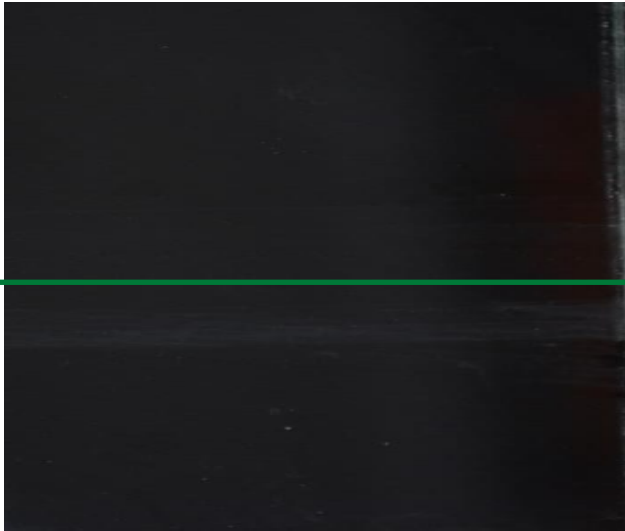
- After 2000 cycles scrub resistance test follow GB/T9755-2014

Col.9[®] 7671 for clear topcoat Water White resistance

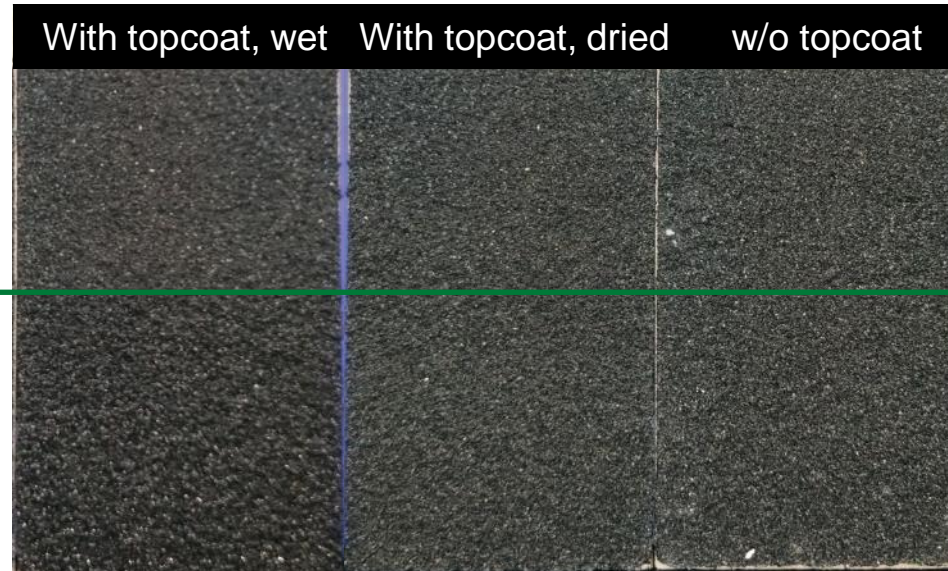
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On glass panel

100um, 30min
@50°C, 24hrs
in water.



On stone finish



2mm black stone finish,
7days dry at RT, apply
clear topcoat with roller.
24hrs dried at RT, 24hrs
in water.

- Col.9[®] 7671 Show excellent water whitening resistance both on glass panel and stone finish

Col.9[®] 7671 for clear topcoat

Alkali resistance



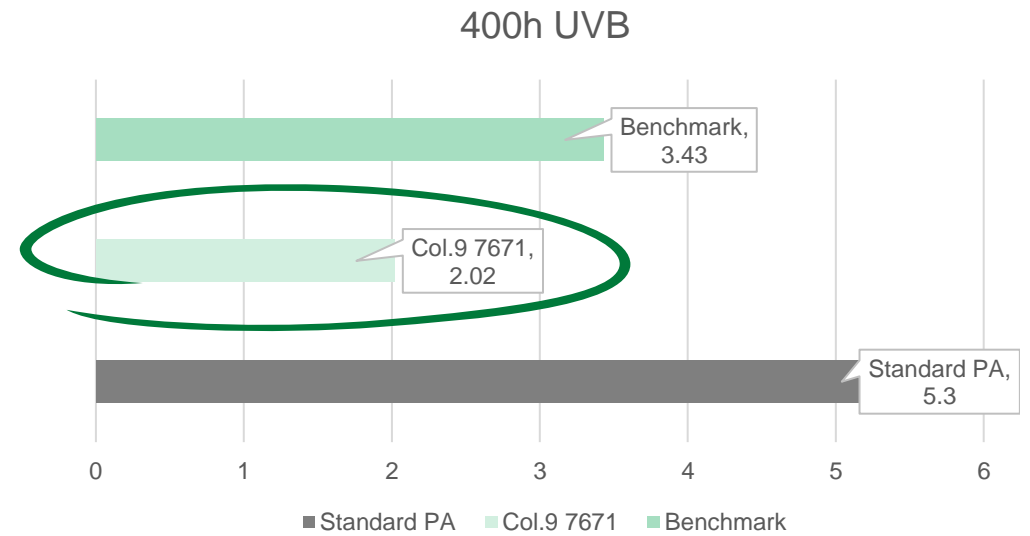
Coated on red exterior coating, 7days dry at RT, apply clear topcoat with roller. 7d dried at RT, 48hrs in saturated Ca(OH)₂ solution.

GB DPUR test shows :

- Col.9[®] 7671 has slight better performance than Standard PA, much better than benchmark.

Col.9[®] 7671 for clear topcoat

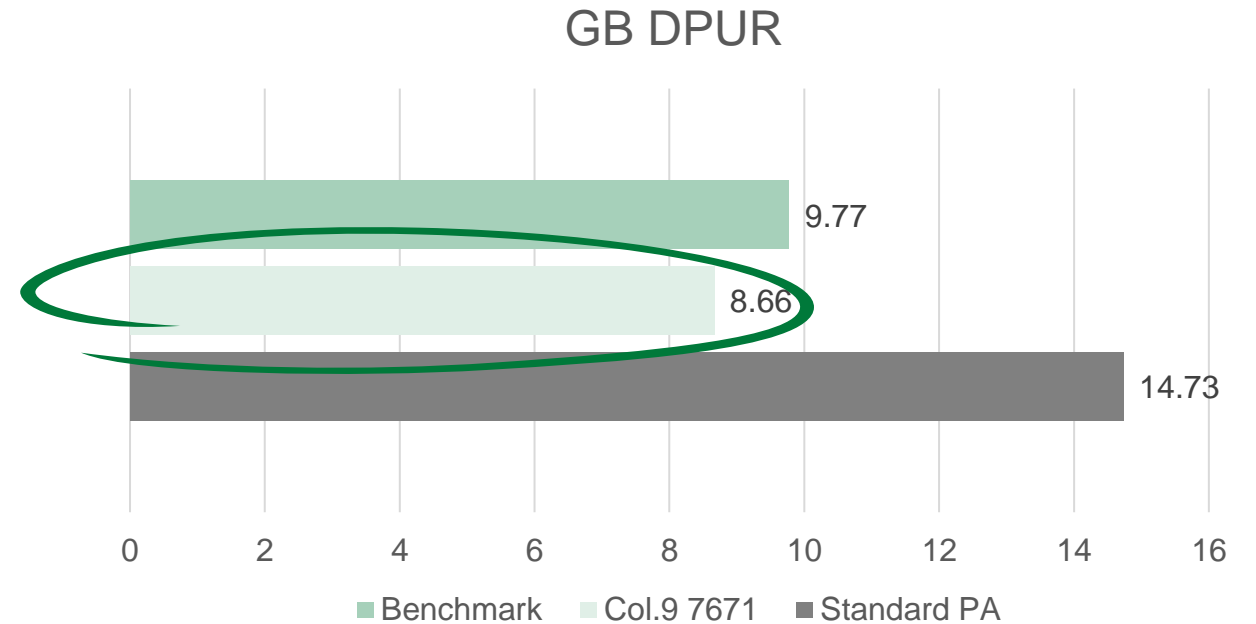
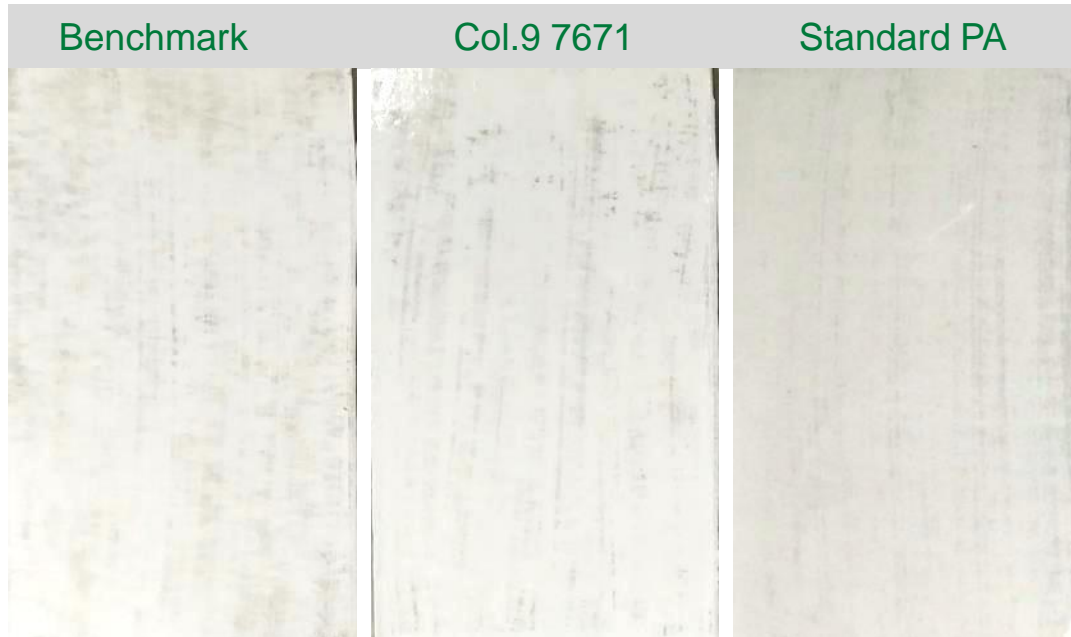
Accelerated aging test-UVB



- Col.9[®] 7671 has slight better performance than benchmark, much better than Standard PA.

Col.9[®] 7671 for clear topcoat GB Dirt Pick-up Resistance

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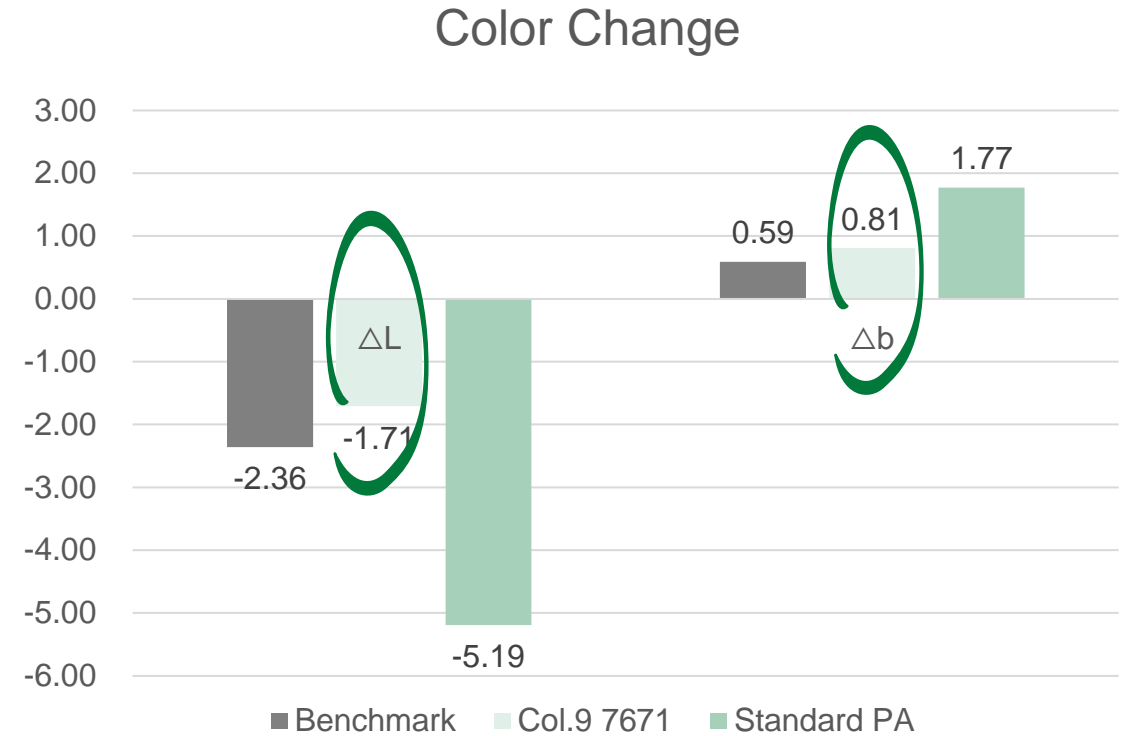
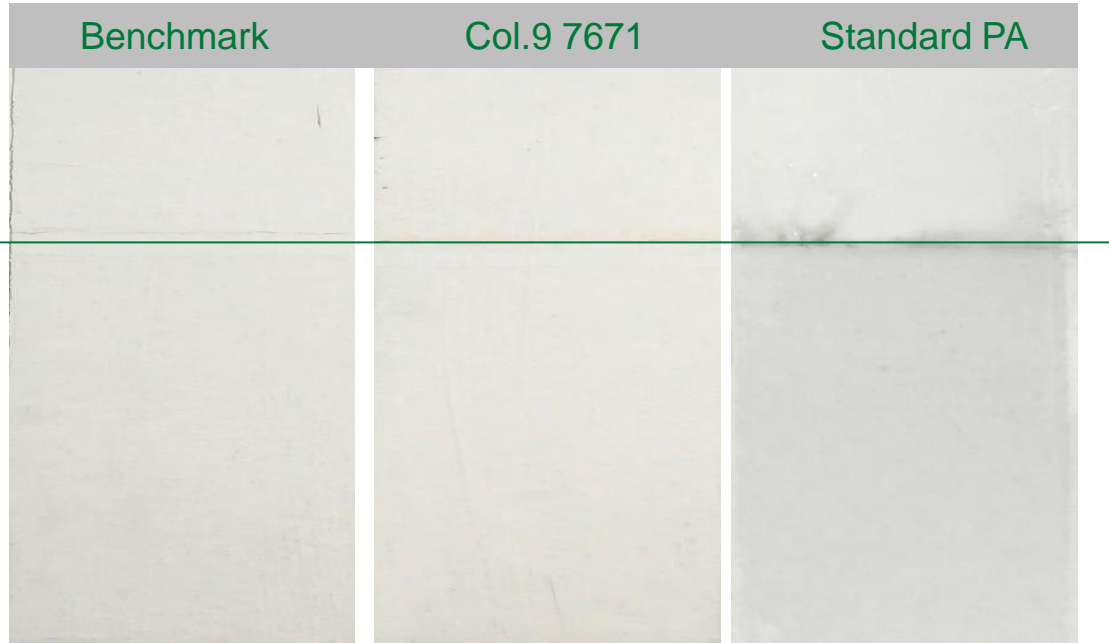


GB DPUR test shows :

- Col.9[®] 7671 has slight better performance than benchmark, much better than Standard PA.

Col.9[®] 7671 for clear topcoat

Natural exposure: 45°, 6 weeks , BACC



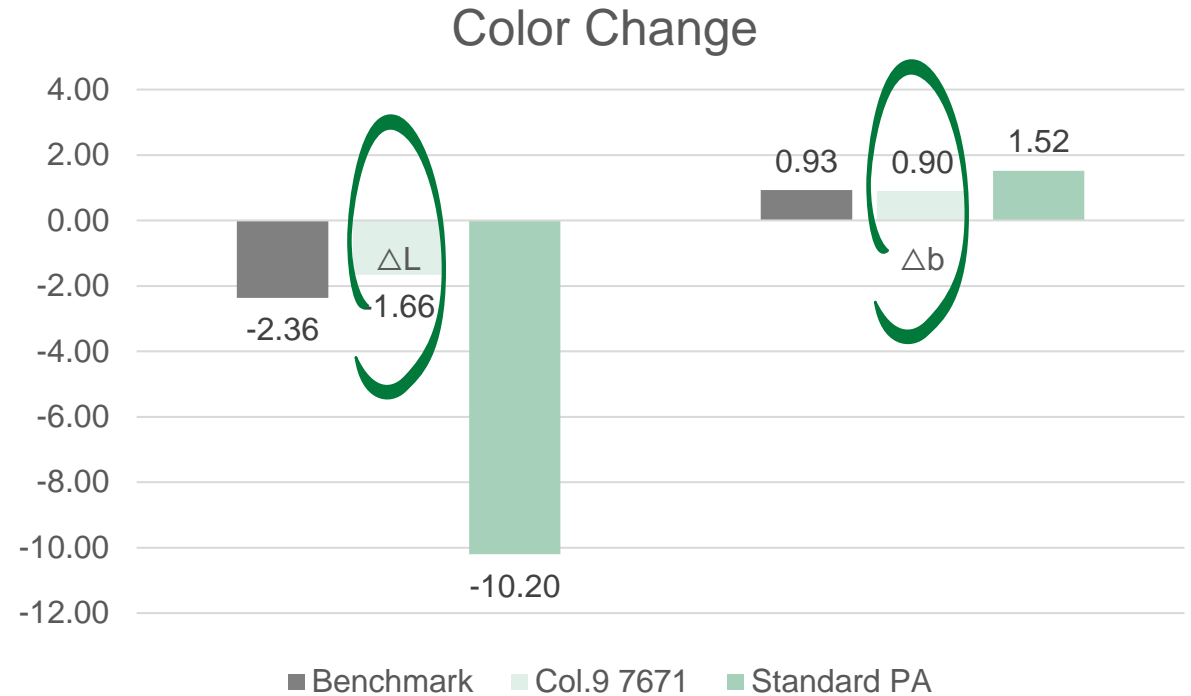
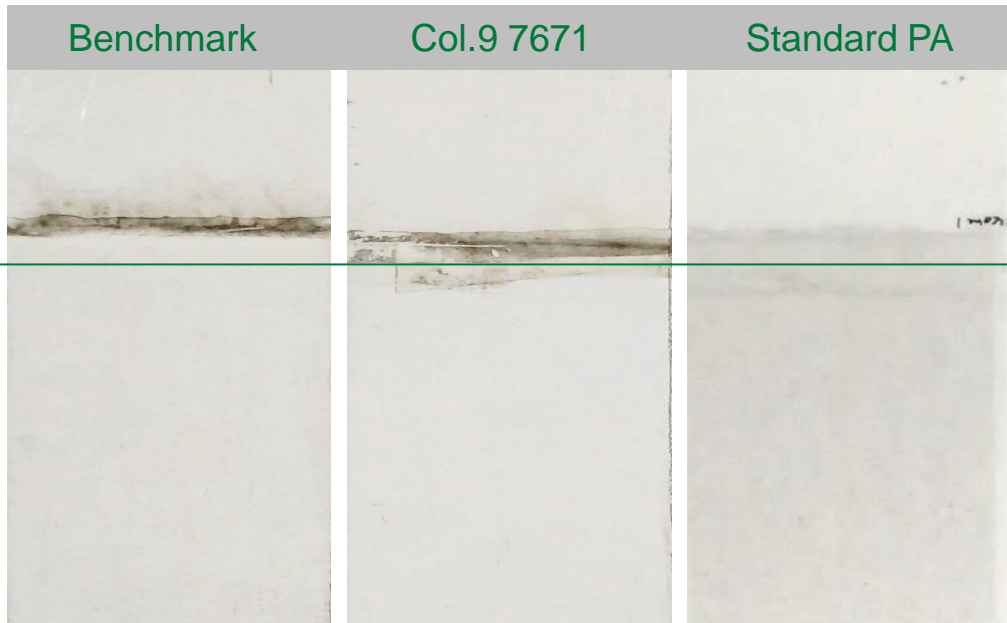
- Col.9[®] 7671 solution shows excellent DPUR after 6 weeks in natural exposure test



Col.9[®] 7671 for clear topcoat

Natural exposure: 45°, 3months, BACC

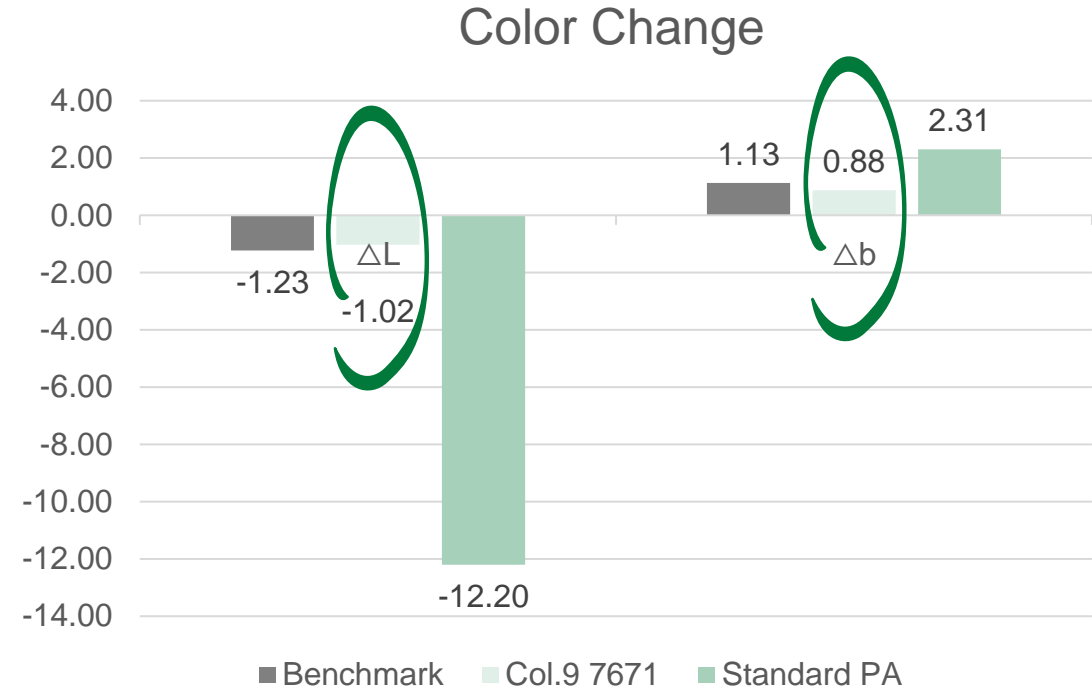
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- Col.9[®] 7671 solution shows excellent DPUR after 3 months in natural exposure test.

Col.9[®] 7671 for clear topcoat

Natural exposure: 45°, 8months, BACC

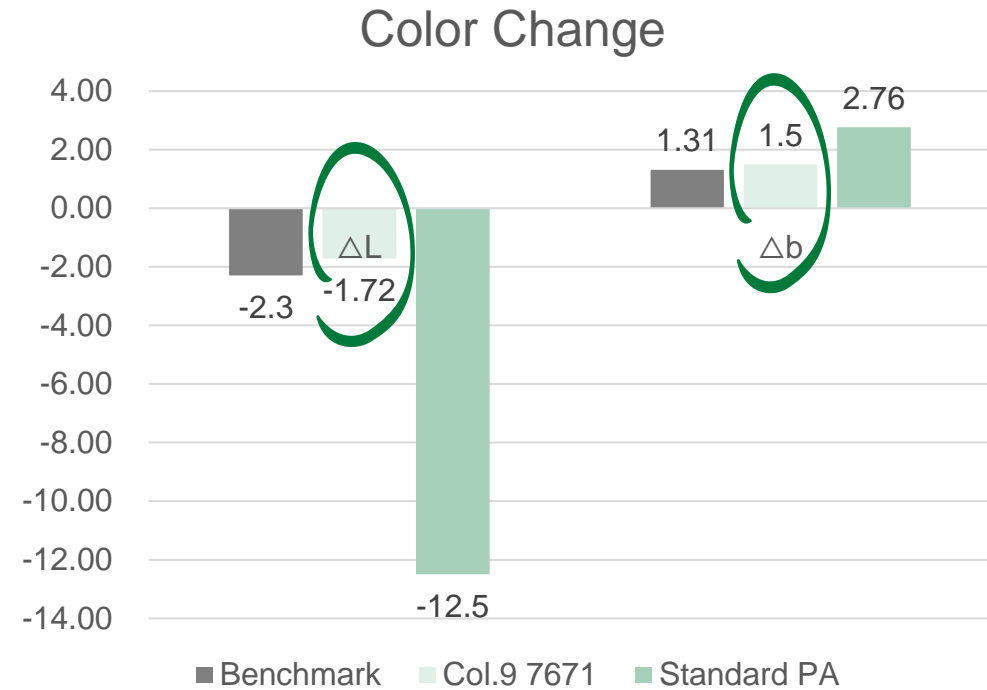
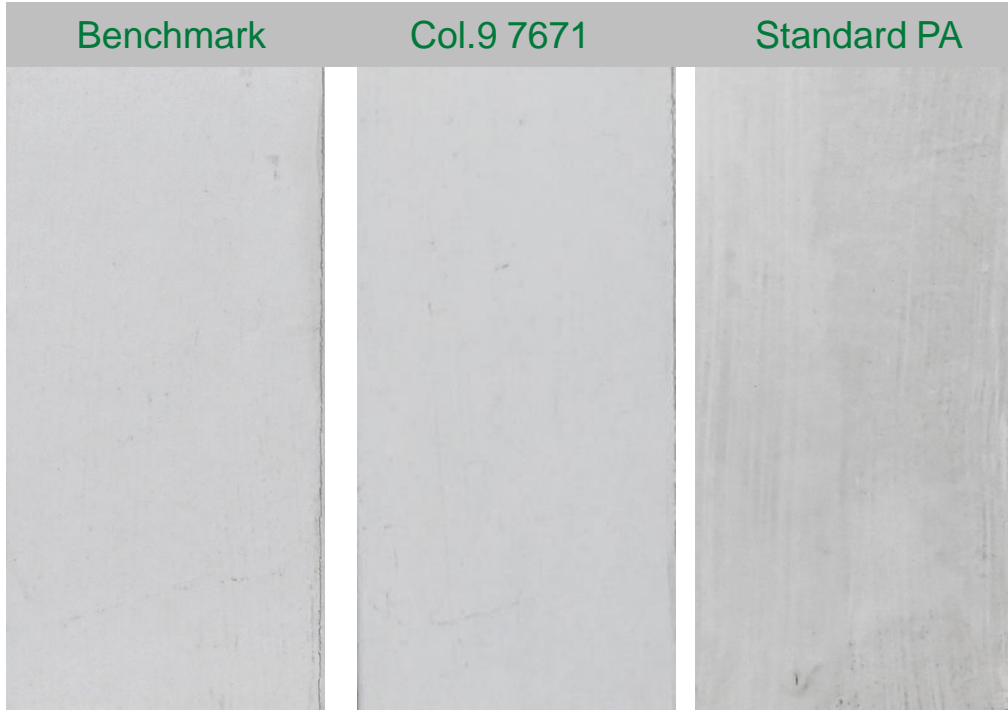


- Col.9[®] 7671 solution shows excellent DPUR after 8 months in natural exposure test



Col.9[®] 7671 for clear topcoat

Natural exposure: 45°, 11 months, BACC



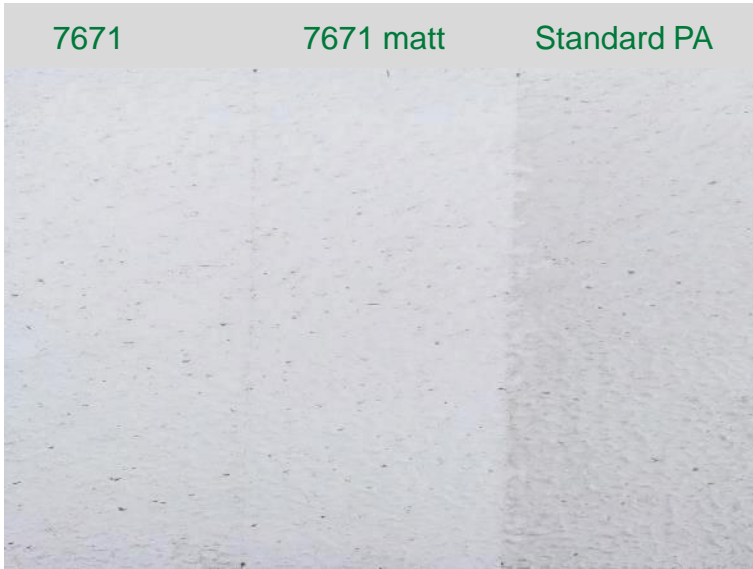
- Col.9[®] 7671 solution shows excellent DPUR after 11 months in natural exposure test



Col.9® 7671 for clear topcoat

Natural exposure: roll-on texture elastomeric 45°, BACC

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3months



4 months

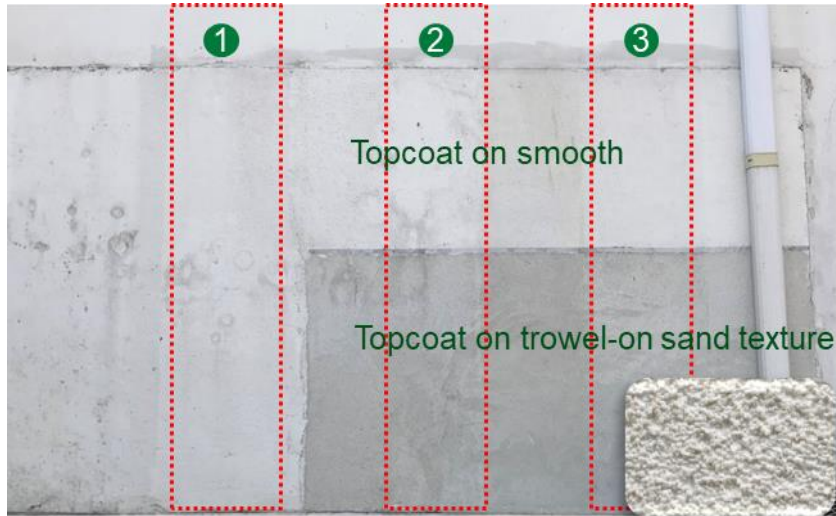


6 months

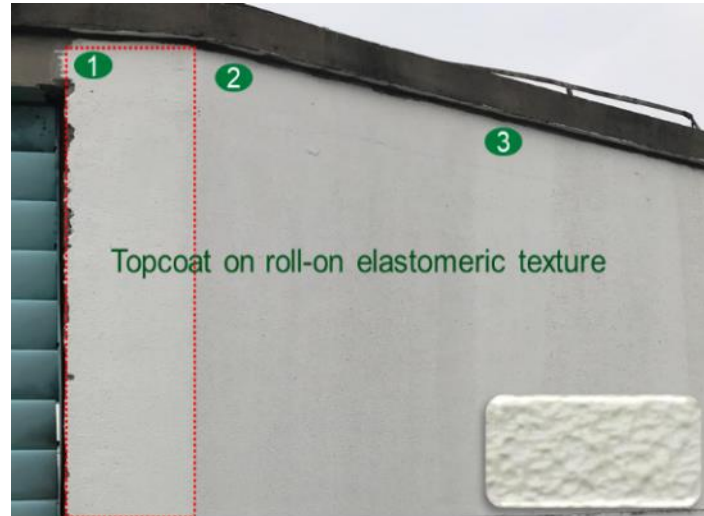
- Col.9® 7671 solution shows excellent DPUR in natural exposure test on texture elastomeric

Col.9[®] 7671 for clear topcoat 90° natural exposure

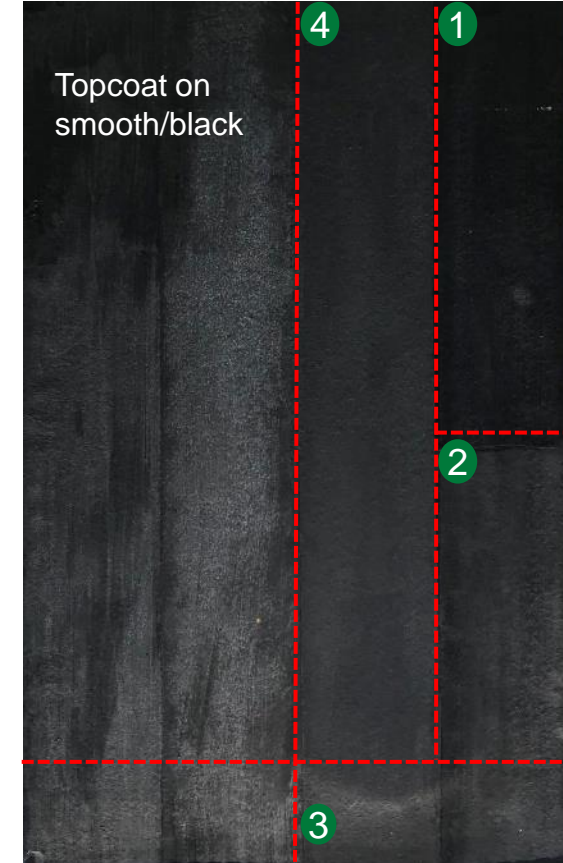
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2017.8 – 2021. 5



2017.9 – 2021. 5



2018.6 – 2021. 5

- 1. Col.9[®] 7671, gloss
- 2. Lab sample , gloss
- 3. Benchmark
- 4. Col.9[®] 7671 matt

Col.9® 7671

- Low dirt pickup surface modifier for exterior coatings

Strength

- Excellent dirt-pick-up resistance
- Excellent Scrub resistance
- Excellent Water Whitening resistance
- Excellent weatherability

Features

- IO Hybrid technology
- High strength, good permeability
- APEO free
- Non-Yellowing

- ✓ Highly innovative IO-Hybrid technology that combines the hardness of inorganic binders with the elasticity of organic binders. Keeping surfaces fresher for a longer time.





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