

NG 1314/D Multi-functional Glass Coating



FOR MAXIMUM PROTECTION AND PERFORMANCE OF EXTERNAL GLASS SURFACES

BENEFITS:

Nanovations NG1314/D is a durable protective coating for external glass.

The multi-functional, ultra-thin coating reduces dirt and dust accumulation and at the same time provides a scratch resistant easy to clean protection.

The coating protects glass from water erosion, and from stubborn staining, from salt spray and mineral deposits. Coated surfaces are significantly easier to clean.

Glass surfaces will simply look more attractive and stay functional for significantly longer.

Unlike other products, NG 1314/D is inorganic and comes with the natural UV resistance of colloidal sol gel formulations.

Such proven and reliable materials can handle harsh conditions from subzero to extreme hot environments. NG 1314/D can be used on solar panels + solar mirrors as well.

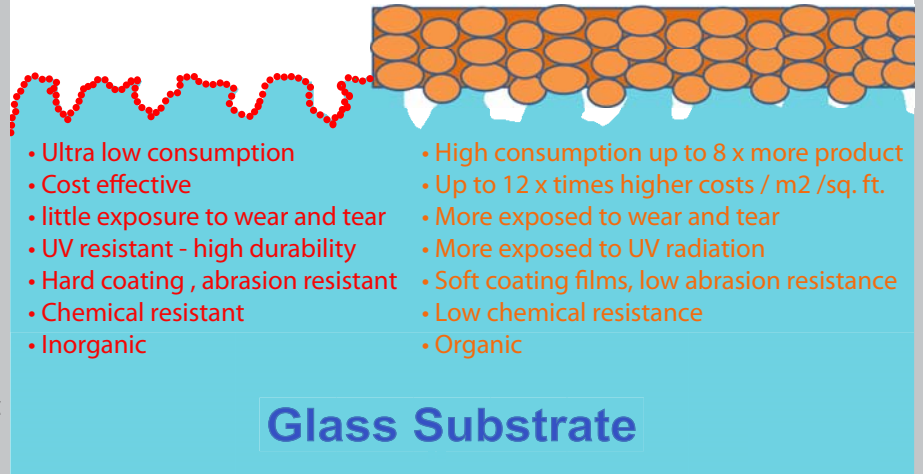
TECHNICAL PROPERTIES :

- Colloidal sol gel solution
- Ultra-thin, true nano-scale final layer
- Cures at room temperature
- Industrial application methods can be used
- Water repellent, low roll off angle
- Low dust accumulation effect
- Easy to clean effect
- Fast cross linking with the substrate.
- Improved scratch resistance
- High durability, long lasting
- Water rolls off, easy to collect for reuse (solar)
- Nano-structured, inorganic sol gel.
- Can be applied over ARC on Solar panels
- Cost effective, highest coverage available
- Up to 14,000 sq. ft. / gallon, 200 - 400 m² / litre
- Outstanding UV resistance.
- Heat resistant.
- Hardness up to 7 on Mohs scale.
- Invisible, unchanged light transmission rate
- Monolayer technology - not film building.
- Self assembling curing process.

The new generation of ultra-thin glass coatings.

NG 1314/D

Traditional Glass Coating

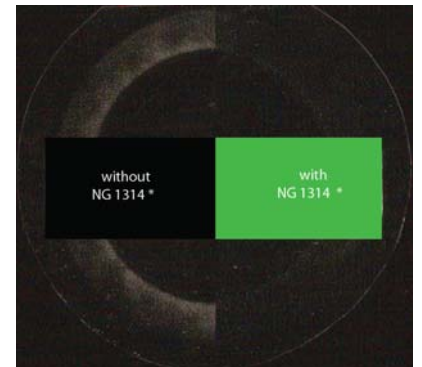


- Ultra low consumption
- Cost effective
- little exposure to wear and tear
- UV resistant - high durability
- Hard coating, abrasion resistant
- Chemical resistant
- Inorganic

- High consumption up to 8 x more product
- Up to 12 x times higher costs / m² /sq. ft.
- More exposed to wear and tear
- More exposed to UV radiation
- Soft coating films, low abrasion resistance
- Low chemical resistance
- Organic

NG 1314/D offers long term glass protection and reduction of dry dust accumulation.

NG 1314/D create a scratch resistant ultra-thin layer, that protects glass from micro scratches and general wear and tear for a long period of time.



NG 1314/D provides an easy to clean surface effect in all situations, even on surfaces with low or little fall, like awnings and glass roofs. A self-cleaning effect can appear when the glass is fully exposed to clean rain.

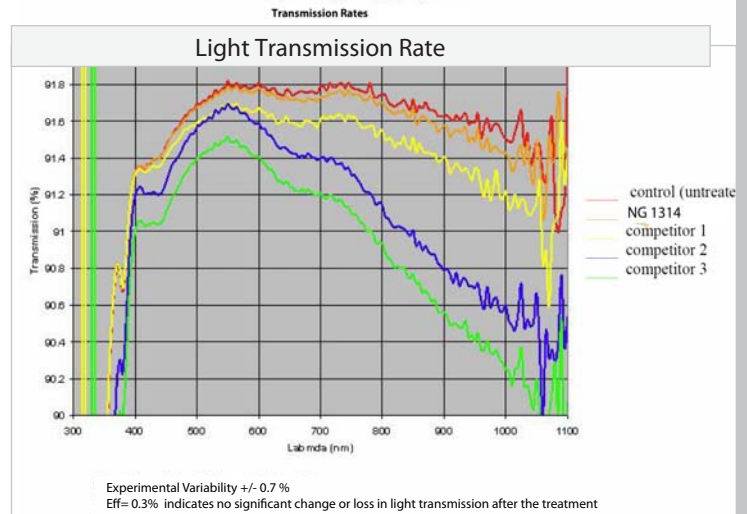


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Product Data	
Measured at Standard Test Conditions	
Appearance	Clear liquid
Storage shelf life	2 years
Application method	Spray and wipe, roller coater , coating machines
Colour	clear
Chemical composition	Colloidal Sol Gel
Curing temperature	Room temp. For Infrared or UV curing please call
Hardness	6.5- 7 Mohs room temp cured . up to 7 Mohs with IR/UV curing
Temperature resistance range	- minus 50 ° C to + 300 ° C
Specific weight	0.790 g/ cbcm
Coverage rate	up to 200 - 400 m2 / litre or up to 14,000 sq.ft / gallon
Storage conditions	-5° C +/-30° C
Chemical storage for flammable liquid	class 3

Chemical Resistance		
Measured at Standard Test Conditions		
Cleaners	pH 3 - pH 11	resistant
Hydrocarbon solvents, Diesel , Petrol , Kerosene		resistant
Hydrochloric and Sulphuric acid and citric acid 5 %		resistant
Break fluid , oil , hydraulic oil		resistant
Ethanol , Isopropanol Alcohols 99 %		resistant



Tested Operating Conditions	
Temperature	-40° C to +85° C
Exposed weathering Lab Local Exposure	Allunga Exposure Laboratory, Townsville Australia Sydney , Australia
Glass thickness	not relevant , test panel 3.2mm

Warranties and Certifications	
Warranties	10 year standard product warranty on the coating. Special warranties under ISO 9001:2008 conditions available
Reference	IEC 61215 , DIN 13300

Test Data			
Abrasion resistance	Taber test wet scrub resistance 40,000 - 80,000 cycles 500 g / brush	Contact angle	112 - 118 degree , after abrasion test 96 - 94 degree.
Substrate	High transmission tempered glass	Roll off angle	6 - 8 degree
UV resistance	Artificial 25 year simulation Over 10 year in real world projects, under Australian conditions	Salt spray test	1000 hours / pass

Test Details		
<p>Taber Abrasion Test Hydrophobic Glass Coatings with 2 cycles of 500 hours UV radiation each</p>	<p>Contact angle test with Rame-hart Geniometer Nanovations, Serial No. 1958</p>	<p>Taber test on 2 glass panels with 2 brushes 500 g each 40,000-80,000 cycles test method DIN 13300 Contact us for test video</p>
<p>Abrasion comparison test . All competitive products used in the test offer 10 year warranty , with one company a life time warranty. Contact us to find out more. In addition Nanovations product was tested with 500,000 cycles wet wipe resistance by a independent accredited US laboratory in February 2014. Test reports are available on request .</p>		