

DELTA NANO 100 SELF CLEANING PAINT SYSTEM

Nano Titanium Dioxide Self-Cleaning Paint System



DESCRIPTION

Delta Nano 100 Self Cleaning Paint System comprises of:

- Delta Starlite 117* – a solvent-based acrylic primer.
- Delta Starlite PU 118* – a solvent-based polyurethane coating integrated with proprietary nano-sized functional additives to enhance the self-cleaning effect.
- Delta Nano 100 Primer* – a water-based nano-sized TiO_2 (titanium dioxide) primer which serves as a barrier layer between Delta Starlite PU 118 and Delta Nano 100 Top.
- Delta Nano 100 Top* – a water-based nano-sized TiO_2 (titanium dioxide) topcoat which has the active ingredient that gives the self-cleaning effect.

Note: Delta Nano 100 Top can be used independently as a self-cleaning coating with ceramic tiles, roof tiles, marble, granite, stone, concrete, masonry and other mineral surfaces.

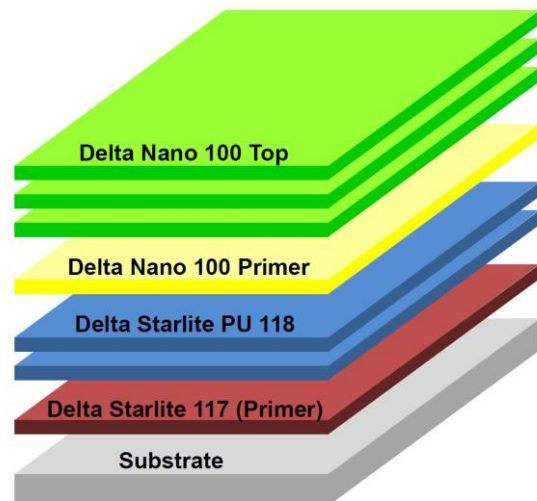
BENEFITS

- ❖ Reduce the maintenance cost of architecture surfaces
- ❖ Improve aesthetics of buildings

USES

- ❖ For self-cleaning of painted surfaces of building façade.

SYSTEM DESIGN



FINISH

Gloss

COLOUR

Extensive selection available

SURFACE PREPARATION

Substrates to be coated must be structurally sound, clean and free from any contamination. Use mechanical stone grinding or other mechanical means to remove laitance. All residues must be removed by vacuum cleaning to provide a dry, dust free open textured surface. For other specific application, consult DELTA INTERCONTINENTAL P/L.

DELTA NANO 100 SELF CLEANING PAINT SYSTEM

Nano Titanium Dioxide Self-Cleaning Paint System



APPLICATION

- ❖ 1 coat of Delta Starlite 117
@ 8 m²/lit/coat @ 25µm/coat
 - ❖ 2 coats of Delta Starlite PU 118
@ 10 m²/litre/coat @ 50µm/coat.
 - ❖ 1 pass of Delta Nano 100 Primer
@ 75 - 90 m²/litre/pass.
 - ❖ 3 passes of Delta Nano 100 Top
@ 75 - 90 m²/litre/pass.
- Subjected to site condition, more passes can be applied.

Tools:

- ❖ Delta Starlite 117 and Delta Starlite PU 118
- applied by brush, short nap roller or airless sprayer.
- ❖ Delta Nano 100 Primer and Delta Nano 100 Top
- applied by spray gun with atomized air and alternating vertical and horizontal spray movement.

Recoating Time:

- ❖ Delta Starlite 117 – Min : 8 hours @ 35°C
Max : 7 days @ 35°C
- ❖ Delta Starlite PU 118 - Min : 3 hours @ 35°C
Max : 7 days @ 35°C
- ❖ Delta Nano 100 Primer - Min: When coating is dry. Max: 24 hours before application of Delta Nano 100 Top.
- ❖ Delta Nano 100 Top - Interval between pass: when previous pass is dry.



TECHNICAL AND APPLICATION DATA

Delta Starlite 117	
Flash Point	>25°C
Volume Solid	43%
No. of Components	1
Recommended DFT	25µm per coat
Delta Starlite PU 118	
Flash Point	29°C
Volume Solid	60%
Recommended DFT	50 - 75µm per coat
No. of components	2
Mixing ratio (by vol)	6.4 : 1 Part A : Part B
Pot Life	90 min @ 35°C
Delta Nano 100 Primer & Top	
Anti Microbial (JIS R1702:2006)	See report enclosed
Industrial Hygiene Monitoring tested by Setsco	See report enclosed
Accelerated Weathering (ISO 11341:2004)	See report enclosed
Dirt Collection (SS500:2002)	See report enclosed

DELTA NANO 100 SELF CLEANING PAINT SYSTEM

Nano Titanium Dioxide Self-Cleaning Paint System



STORAGE CONDITIONS AND SHELF LIFE

All materials should be stored in a cool, dry place without exposure to direct sunlight. Shelf life of all materials is 12 months.

SAFETY

General PPE and safety measures for chemicals to be complied with. There should be appropriate ventilation and exhaust at application area.

PACKAGING

- Delta Starlite 117 : 5 litre/pail
- Delta Starlite PU 118 : 5 litre/set
- Delta Nano 100 Primer : 1 litre/bottle
- Delta Nano 100 Top : 1 litre/bottle