



### Selection & Specification Data

<b>Product Name</b>	NANOISOLA Industrial
<b>Product No.</b>	0864400606150002
<b>Description</b>	Nanolsola Industrial is a composite ceramic insulator that's formulated to provide thermal protection for tanks, vessels, boilers and other facility surfaces up to 160°C. The coating's high-tech formulation can be sprayed on as a combined paint and insulation system, improving equipment aesthetics while protecting substrates, safeguarding personnel and preventing corrosion.
<b>Features</b>	<ul style="list-style-type: none"> <li>Provides thermal insulation</li> <li>Excellent personnel protection</li> <li>Prevents Corrosion Under Insulation</li> <li>Excellent Damping to Weight Ratio</li> <li>Easily applied (Roller, Brush, Sprayer)</li> <li>Increases efficiency and saves energy</li> <li>Very LOW VOC levels</li> <li>Vapor retardant</li> <li>Adheres to most substrates</li> </ul>
<b>Base</b>	Water-based Insulation Coating
<b>Gloss</b>	Flat
<b>Color</b>	White
<b>Priming</b>	Primer required for carbon steel substrates.
<b>Weight dry film to area</b>	0.170 kg/m <sup>2</sup> at 0.50 mm dft
<b>Practical Volume Solids Content</b>	80%
<b>Average Coat Thickness</b>	0.5 mm WFT at 21°—54° C
<b>Practical Dry Coat Coverage</b>	1.5 m <sup>2</sup> /liter @ 0.5 mm
<b>VOC Content</b>	8 grams/liter

### Substrates & Surface Protection

<b>Surface Prep.</b>	Surface should be dry and free of foreign matter. Surface prep can be used to NACE 1-3 (SSPC SP 5-6) when applicable.
<b>Ferrous Surfaces</b>	Should be primed prior to application of Nanolsola Industrial Insulating Coating. Since the coating is water based, it is important to have a boundary layer of protection to prevent flash rusting.
<b>Non-ferrous Surfaces</b>	The coating can be applied directly to nonferrous surfaces. Surface should be clean and free of any oil, dirt or other foreign matter.

### Application Conditions

<b>Surface Temperatures</b>	Surface temperatures for applications should be greater than 15° C or above. Lower surface temperatures will increase dry times.
<b>Applications</b>	For surface or ambient temperatures (15°—60° C), an initial tack coat is recommended of 0.25mm. This tack coat will help eliminate sag on vertical wall applications. Typical coat thickness should not exceed 0.5—0.55mm wet. Coating can be reapplied after each coat is thoroughly dry. Product can be applied in successive coats to increase insulation ability.

### Application Equipment

<b>Airless Sprayer</b>	<p><b>Pump Ratio:</b> 33:1 or larger</p> <p><b>Volume:</b> 1.5 gpm (5.7 lpm) or greater</p> <p><b>Hose:</b> 3/8" or larger with no more than 3' of 1/4" whip. 1/2" hose recommended for length above 50'.</p> <p><b>Tip Size:</b> 0.017" (for tight spots) 0.019—0.023" (Normal use)</p> <p><b>Pressure:</b> Minimum of 3000 PSI</p>
<b>Small Spray Application</b>	The SA Gun is great for small applications and areas that might need touchup. It can be used with or without the product cup attachment depending on how much area is to be sprayed.
<b>Brush</b>	Brushing is only recommended for touch-up of less than 0.04 m <sup>2</sup> .

## Product Data

Item	Metric Value	Test Method
UV-A Exposure	Excellent 2000 hrs	ASTM D-5894
Humidity Cabinet	Excellent 2000 hrs	ASTM D-4585
Flame Spread	Class A	ASTM E-84/87
Cross Hatch Adhesion	100% 5B	ASTM D-3359
Pull Apart Strength	260-360 psi	ASTM D-4541
Thermal Conductivity	(0.068 W/m/K)	Thermal Probe Study
Smoke Developed	Class A	ASTM E-84/87

Temperature	Coating thickness	Coats
30 – 50 C	0.5 mm	1
50 – 70 C	1 mm	2
70 – 90 C	1.5 mm	3
90 – 120 C	2 mm	4
120 – 140 C	2.5 mm	5
140 – 160 C	3 mm	6

## Mixing & Thinning

**Mixing** Care should be taken during mixing prior to application not to cause particle shear of the nanocomposite. Preferred method of mixing is using a mixing paddle at slow speed for approximately 2 minutes.

**Thinning** Thinning is normally not needed

**Tinting** Nanolsola White Can be tinted with universal paint pigment

## Package, Handling & Storage

<b>Available Sizes</b>	5-gallon pail (18.92 liters)
<b>Shelf Life</b>	1 year after manufacture
<b>Storage Temperatures</b>	10°C to 35°C
<b>Caution</b>	Do not let product freeze
<b>Flash Point</b>	None
<b>Pot life</b>	Coating is one part, so no catalyzation is needed. Pail can be reused if properly sealed.

## Cleanup & Safety

<b>Cleanup</b>	Equipment may be cleaned with soap & water
<b>Safety</b>	Eye protection recommended
<b>Ventilation</b>	Recommended for constricted areas
<b>Caution</b>	This material is not for human consumption
<b>Clothing</b>	Safety clothing & gloves are recommended

## Dry Times vs. Humidity & Cure Times

Temperature	% Humidity	Time Between Coats (hours)	Cure time
10–25 °C	10–70 %	6 – 10	60-72 hrs
25–35 °C	10–70 %	2 – 6	48-60 hrs
35–45 °C	10–70 %	2 – 6	36-48 hrs
45–50 °C	10–70 %	2 – 6	20-24 hrs
50–54 °C	10–70 %	2 – 6	18-20 hrs
>54 °C	10–70 %	2 – 6	14- 16 hrs

Nanofan Industrial Group

P.O.Box: 16535-643  
Tehran, Iran  
Tel: +98-77740935-6

Email: [info@nanofanco.com](mailto:info@nanofanco.com)

[www.nanolsola.com](http://www.nanolsola.com)

 [www.facebook.com/Nanolsola](https://www.facebook.com/Nanolsola)

**NANO FAN**  
Industrial Group

 **NANOISOLA**  
NANOTECHNOLOGY INSULATION

