



## PRODUCT DATA SHEET

### NANOISOLA INDUSTRIAL Thermal Insulation Coating

Product No. 313000606150002



#### USES:

- Hot Water Pipes
- Processing Tanks
- Industrial Ovens
- Boilers
- HVAC
- Pressure Valves
- Heat Exchangers
- Steam Lines
- Exhaust
- Heaters

#### FEACHURES:

- Thermal insulation
- Personnel protection
- Prevents Corrosion under Insulation
- Improves worker safety
- Non-toxic, water-based, low VOC
- Easily applied by texture sprayer
- Impact and abrasion resistant
- No exterior cladding needed
- Can insulate surfaces up to 160C
- Exhibits outstanding durability
- Reduces surface temperature of hot pipes and equipment
- Can be easily "touched up"
- Water based, one-part coating and has no "pot life"
- Low odor/non-flammable

#### OVERVIEW:

A Nanotechnology-based insulation and corrosion prevention coating that is designed for metal and non-metal substrates up to 160C. It bonds with the surface of the metal to prevent corrosion and CUI. It has excellent splash resistance to chemicals.

**NANOISOLA Industrial Thermal Insulation** is a Nano-composite 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.

**NANOISOLA Industrial thermal insulating coating** works not only to reduce temperatures, but also provides energy savings, thermal insulation and personnel protection all in an easy spray-on application.

**NANOISOLA Industrial coating** combines superior performance with easy application, and is a flexible, affordable option for insulating equipment, tanks, storage vessels, pipes and other factory surfaces.

**Base:** 1-part water-based insulation coating

**Finish:** Semi-Gloss, Flat

**Colors:** White, Grey, can be tinted

**Application:** Can be applied with a texture sprayer or brush

**Minimum Thickness:** one coats of 500 microns each coat

**Theoretical coverage rate:** 30 m<sup>2</sup> per 5-gallon pail @ 1-coat

**Recommended application:** dependent upon application temperatures

**Drying Schedule To Touch - 500 microns wet @ 27°C:** 1 hour

**To Tack Free/recoat:** 8 hours

**Priming:** Primer required for carbon steel substrates

**Mixing:** Preferred method of mixing is using a mixing paddle at slow speed for approximately 2 minutes.

**Thinning:** Thinning is normally not needed

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### PACKAGE, STORAGE & SAFETY:

**Available Sizes:** 5-gallon pail (18.93 liters)

**Shelf Life:** 1 year after manufacture

**Storage Temperatures:** 10°C to 35°C

**Caution:** Do not let product freeze

**Flash Point:** None

**Pot life:** None, pail can be reused if properly sealed.

**Cleanup:** with soap & water

**Safety:** Eye protection recommended

**Caution:** not for human consumption

**Clothing:** Safety clothing & gloves are recommended

**VOC content of mixed system:** < 8 g/L

**Viscosity of mixed coating:** 35,000 to 40,000 (cps)

**Cross Hatch Adhesion:** ASTM D-3359, 100% 5 B

**Pencil Hardness:** ASTM D3363 = H (Hard)

**Salt Fog Resistance:** ASTM B117, 1000 hours = Excellent

**Humidity Cabinet:** ASTM D-4585, Excellent 2000 hrs

**UV-A Exposure:** ASTM D-5894, Excellent 2000 hrs

**Thermal Conductivity:** Thermal Probe Study, (0.068 W/m/K)

**Pull Apart Strength:** ASTM D-4541, 260–360 psi

**Scrub Resistance:** ASTM D2486, 4,800 cycles

**Service Temperature Range:** up to 160°C

**Flame Spread:** ASTM E-84/87, Class A

**Smoke Developed:** ASTM E-84/87, Class A

Temperature	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

Temperature	Cure Time
10 – 15 °C	72 – 96 hrs
15 – 20 °C	60 – 72 hrs
20 – 25 °C	48 – 60 hrs
25 – 30 °C	36 – 48 hrs
30 – 35 °C	24 – 36 hrs
> 35 °C	12 – 24 hrs

### Substrates & Surface Preparation:

Remove all loose contamination by wire brushing. Remove all dirt, grease, oil, soluble salts and other contaminations. Remove all loose, flaking rust and/or paint by one of the following methods: If unable to sandblast use: St 3 Power Tool Cleaning. If able to sandblast use: Sa 2.5 Blast Cleaning

### Application Conditions:

Surface must be clean and dry and free of grease, dirt solvents, etc. Apply directly to the surface. Each coat should be applied 500 microns in thickness with 8 hours dry time between each coat. Two coats is the recommended minimum coverage. Application temperature: 15°C to 70°C, at least 3°C above dew point, 85% max. Humidity

### Application Equipment:

**Sprayer:** Texture sprayer to apply NANOISOLA INDUSTRIAL  
- Recommended: Graco TexSpray RTX 650, 900, 1250 or 1500  
Others that are suitable include:  
- Graco Hopper Gun  
- Wagner Powertex  
- Laco MA1000

**Small Spray Application:** 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.

**Brush:** Brushing is only recommended for touch-up of less than 0.04 m<sup>2</sup>.