

PRODUCT DATA SHEET

NANOISOLA RESIDENTIAL Thermal Insulation Coating

Product No. 313000606150003



USES:

- Walls, ceiling & roofs
- Commercial buildings
- Industrial warehouse
- Ductwork
- Hospitals/Schools
- Military Camps
- Portable Cabins
- Interior or Exterior
- Metal Roofs
- Other Building Surfaces

FEACHURES:

- Thermal insulation
- Energy savings
- Mold resistant
- Moisture resistant
- Non-toxic, water-based, low VOC
- Easily applied by Brush, Roller, spray
- Outstanding durability & weathering
- Space saving
- Provides protection from UV rays
- Exhibits outstanding durability
- Protective against rain, damp, water
- High flexibility
- Vapor permeable
- Can be applied on wood, brick, PVC, drywall, stucco, glass, concrete, metal
- 10-year warranty

OVERVIEW:

NANOISOLA Residential is a grand breaking product by Nanofan Industrial Coatings that utilizes a nanocomposite with an extremely low thermal conductivity and hydrophobic nature.

NANOISOLA Residential is a hydrophobic, environmentally-safe and liquid form of insulation that can be PAINTED on most surfaces with a thickness of less than a millimeter for greater thermal resistance over traditional insulation.

NANOISOLA Residential is an Energy Saving Paint that has unique insulating properties, which will reduce heat loss through walls and ceilings.

A benefit of the **NANOISOLA Residential** is the increase to the thermal envelope of a building without reducing square meters. Additional benefits are mold and moisture resistant, thus increasing air quality.

Base: 1-part water-based insulation coating

Finish: Semi-Gloss, Flat

Colors: White, Blue, can be tinted

Application: Can be applied with brush, roller or paint sprayer.

Minimum Thickness: Two coats of 250 microns each coat

Theoretical coverage rate: 30 m² per 5-gallon pail @ 2-coat

Recommended application: dependent upon application

Drying Schedule To Touch - 250 microns wet @ 27°C: 1 hour

To Tack Free/recoat: 8 hours

Priming: No need

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: 2 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: < 100 g/L

Viscosity of mixed coating: 16,000 to 20,000 (cps)

Permeability: ASTM 1653-03, 5 perms/inch @ 23°C

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, (0.075 W/m/K)

Pull Apart Strength: ASTM D-4541, 2100–2150 psi

Mold Resistance: ASTM D5590 & ASTM G21, Zero or minimal growth

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

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

Thickness of 1 coat: 250 microns

Thickness of 2 coats: 500 microns

Touch dry time for 1 coat: 1 hour

Typical hard dry time: 72 hours

Dry time between each coat: 8 hours

Recommended coats: 2 coats

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 250 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: Airless sprayer to apply **NANOISOLA RESIDENTIAL**

- Recommended: Recommended: Graco Silver Gun, 395

Others that are suitable include:

- H.V.L.P. sprayer
- Roller
- Brush

NANOISOLA coatings can be applied with standard paint spray equipment. Equipment size and performance varies widely, so it is our intention to provide the following recommendations for various sizes of equipment which may be used for the coatings, in addition to other important items to ensure proper application.