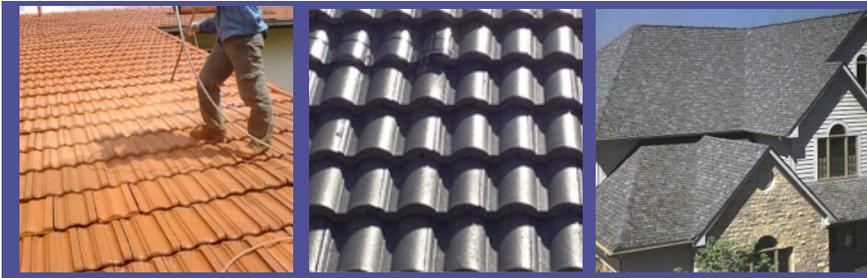


## Product Data Sheet



Thermal Insulation  
Mold & Algae Resistance  
UV Resistance  
Surface Protection  
Moisture Repellent  
Long-Term Durability

### OVERVIEW:

Thermal insulation, mold resistant, UV and moisture resistant CLEAR roof coating. Sustainable coating which reduces energy costs and carbon emissions. Use over sloped roof: Asphalt Shingles, Wood Shingles, Concrete Tile, Clay Tile, Slate Tile, Cement Tile...Metal Roofs too.

Clear, nanotechnology-based insulation and mold resistant coating for easy energy efficiency of roofs. Long-term performance and durability resulting in lower maintenance & cleaning costs and longer asset life. 10 year warranty. Color: Translucent (Clear Coat) with matte finish.

### ADVANTAGES:

**THERMAL PERFORMANCE:** Excellent thermal insulation performance to maximize control of heat loss, contributing to reduced energy costs. Resistant to moisture infiltration and weathering for consistent thermal performance over time.

**MOLD RESISTANCE:** Resistant to growth of mold and mildew. Coating has been tested to ASTM D5590 and ASTM G21 for mold resistance. Keeps your roof beautiful over the years.

**WEATHERING RESISTANT:** Protects surfaces, such as asphalt shingles, from weathering by coating them in a protective moisture and weather resistant clear coat. Reduces damage from harmful UV rays by providing excellent UV resistance. Can increase lifespan roofing materials.

**ENVIRONMENTALLY FRIENDLY:** Non-toxic, non-flammable, water-based coating is low VOC, low odor, and environmentally friendly. Nansulate® coatings are a sustainable, green technology.

**CORROSION RESISTANT FOR METAL:** When used over metal roofs, the hydrophobic nature of this product allows it to provide excellent corrosion resistance.

### CONTACT/ORDERING:

**Phone: 800-767-3998 or +1 239-254-0346**  
**Online: [www.nansulate.com](http://www.nansulate.com)**

### USES:

- ✓ Asphalt Shingles
- ✓ Clay Tiles
- ✓ Concrete Tiles
- ✓ Wood Shingles
- ✓ Slate Tiles
- ✓ Metal Roofs



### BENEFITS:

- ✓ Energy savings
- ✓ Mold resistant, without use of harsh chemicals
- ✓ Moisture repellent
- ✓ Cost effective, with long-term savings and short payback period
- ✓ Non-toxic, water-based, low VOC
- ✓ Increases thermal insulation performance of the roof
- ✓ Outstanding durability and weathering
- ✓ Easily applied by brush, roller or paint sprayer.
- ✓ Clear, with matte finish, allowing the beauty of your roof to shine through
- ✓ Provides protection from harmful UV rays
- ✓ Reduces need for regular power washing of roof due to staining
- ✓ Breathable, won't act as a vapor barrier
- ✓ Easy cleanup with soap and water
- ✓ Only 38¢ per S.F.

### Gold Standard Application Support

With your order, we provide you with personalized support to ensure the success of your Nansulate® application. Contact us to learn more!

## PRODUCT DATA:

Theoretical coverage rate for One Gallon (3.79 Liters)	Yields approximately 5 mils/127 microns wet film thickness (1 coat) over 450 square feet (42 square meters) of surface area, depending on surface.
Coverage rate for typical application thickness for One Gallon (3.79 litres)	Yields approximately 10 mils/254 microns wet film thickness (2 coats) over 225 square feet (21 square meters) of surface area, depending on surface.
Typical applied coat thickness	5 wet mils (127 microns) per coat
Typical dry film thickness (DFT) of 1 coat	2.5 mils (63.5 microns) DFT
Typical touch dry time for 1 coat	20 minutes to 1 hour
Typical hard dry time	72 hours
Typical full cure time	30 days, dependent upon environmental variables
Shelf life	2 years, from date of manufacture
VOC content	100 g/L (calculated)
Viscosity	3500 to 4000 (cps)
Cross Hatch Adhesion - ASTM D-3359	0% 5B, edges remain smooth, no flaking
Pull Apart Strength - ASTM D-4541	2400-2450 psi
Flame Spread/Smoke Developed - ASTM E84	Class A
U/V Cabinet Aging Cabinet	Passed 10 year equivalent with no discoloration or loss of adhesion
Mold Resistance - ASTM D5590 & ASTM G21	Zero or minimal growth
Thermal conductivity testing on concrete roof tile	30% decrease in thermal conductivity
Thermal resistance testing on concrete roof tile	45% increase in thermal resistance
Emissivity as tested on concrete roof tile	0.91
Permeability	5 perms/inch @ 23 deg C.

## LIMITATIONS:

- Do not use as a final floor covering.
- Do not install where long-term submersion in liquid or continuous exposure to moisture is a possibility.
- Do not install over poor surfaces, such as those with flaking paint, grease or other contaminants.
- Do not allow application to be subject to rain or condensation for at least 72 hours.
- Do not allow application to be subject to freezing temperatures during first 30-60 days.
- Do not rely on visual measurement for coating thickness. Always use a wet film thickness (WFT) and/or dry film thickness (DFT) gauge in several areas to ensure proper application Thickness. See Crystal Application Handbook for further details.

## NOTE ABOUT CURE TIME:

**The product reaches full insulating ability AFTER a cure time of approximately 30-45 days, which is dependent upon environmental variables. Test of thermal performance should be performed after full cure. Thermal benefits will typically begin to be seen approximately two weeks after application, and will continue to improve as the cure time completes. Final cure is complete when thermal performance has reached a steady state.**

All statements, technical information and recommendations contained in this document are based upon tests or experience that Industrial Nanotech believes are reliable. However, many factors beyond Industrial Nanotech's control can affect the use and performance of an Industrial Nanotech product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the Industrial Nanotech product to determine whether it is fit for a particular purpose and suitable for the user's method of application. No warranty, expressed or implied is given regarding the accuracy of this information. Except where prohibited by law, Industrial Nanotech will not be liable for any loss or damage arising from the Industrial Nanotech product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. For questions, contact Industrial Nanotech, Inc. at 800-767-3998 or +1 239-254-0346. Nansulate® products are Made in the USA.