

Product Data Sheet



Thermal Insulation
Mold Resistance
UV Resistance
Surface Protection
Allows Visible Light
Long-Term Durability

OVERVIEW:

Thermal insulation, mold resistant, UV and moisture resistant coating. Sustainable coating which reduces energy costs and carbon emissions. Indoor and outdoor use. Use over brick, painted walls, glass, concrete, stucco, drywall, and many other surfaces. Can be painted over.

Clear, nanotechnology-based insulation and mold resistant coating for easy energy efficiency of commercial buildings. Long-term performance and durability resulting in lower maintenance costs and longer asset life. Allows retrofit insulation of historical buildings without interfering with design aesthetics. 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, 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. Reduces chance of food contamination.

LIGHT TRANSMISSION: Can be used to insulate skylights and factory windows that do not require complete clarity. Gives glass a slightly frosted look for security and reduced glare. Allows 92% visible light transmission as tested on pane glass.

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

SURFACE PROTECTION: Highly moisture resistant as well as UV resistant, protecting underlying building surfaces from weathering and damage due to the elements.

CONTACT/ORDERING:

Phone: 800-767-3998 or +1 239-254-0346
Online: www.nansulate.com

USES:

- ✓ Commercial buildings
- ✓ Walls
- ✓ Windows/Skylights
- ✓ Ceilings
- ✓ Ductwork
- ✓ Hospitals/Schools
- ✓ Interior or Exterior
- ✓ Historic Preservation
- ✓ Other Building Surfaces

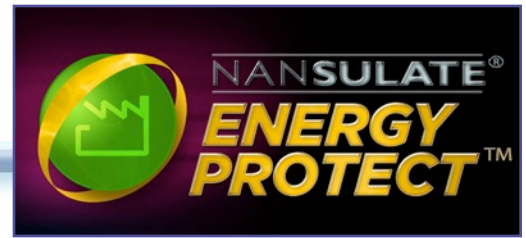
BENEFITS:

- ✓ Energy savings
- ✓ Mold resistant, without use of harsh chemicals
- ✓ Moisture resistant
- ✓ Cost effective, with long-term savings and short payback period
- ✓ Non-toxic, water-based, low VOC
- ✓ Allows light transmission, while reducing glare
- ✓ Outstanding durability and weathering
- ✓ Easily applied by brush, roller or paint sprayer.
- ✓ Ideal for solid block walls, not easily insulated by fibrous insulation
- ✓ Space saving – each coat is applied at 4 wet mils; a 3-coat application will dry to 6 dry mils/150 microns
- ✓ Can be painted over
- ✓ Provides protection from harmful UV rays
- ✓ Low odor
- ✓ Breathable, won't act as a vapor barrier
- ✓ Easy cleanup with soap and water



Gold Standard Application Program

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 4 mils/100 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 12 mils/300 microns wet film thickness (3 coats) over 150 square feet (14 square meters) of surface area, depending on surface.
Typical applied coat thickness	4 wet mils (100 microns) per coat
Typical dry film thickness (DFT) of 1 coat	2 mils (50 microns) DFT
Typical application thickness (DFT) of 3 coats	6 mils (150 microns) DFT
Typical touch dry time for 1 coat	1 hour
Typical hard dry time	72 hours
Typical full cure time	30 days, dependent upon DFT and 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 Exposure	Passed 2000 hours
Mold Resistance - ASTM D5590 & ASTM G21	Zero or minimal growth
Spectrophotometer testing	Allows through 92% visible light (tested on pane glass which typically allows 92%-96% transmission, uncoated)
Permeability	5 perms/inch @ 23 deg C.
Thermal resistance (UNI EN ISO 8990:1999)	28.98% increase in thermal resistance
Thermal transmission (UNI EN ISO 8990:1999)	34.8% decrease in thermal transmission, measured in watts

(As tested at a 3-coat coverage on 8 cm cement wall section with plaster on both sides)

OTHER TESTING:

Nansulate® technology has been tested and qualified for energy efficiency rebate program for the Government of Mexico by the CFE (Comision Federal de Electricidad - Federal Electric Commission).

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 DFT. See 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 DFT and 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.