



Product Data Sheet



Thermal Insulation
Chemical Resistant
Personnel Protection
In-Service Application
Flame Resistant
Long-Term Durability

OVERVIEW:

Thermal insulation, chemical resistant, flame resistant and moisture resistant coating. Also provides corrosion prevention as part of the Ultimate Insulation Solution (UIS) with the EPX NanoPrime™. Sustainable coating which reduces energy costs and carbon emissions. Indoor and outdoor use. When applying to metal and non-porous surfaces, you must use EPX NanoPrime™ at 4-coats as a primer. Note: Nansulate® High Heat may also be used as a primer. If using outdoors, top coat with 1-coat of EPX NanoPrime™ to prevent UV degradation. EPX has a heavy duty exterior that is resistant to splash contact with acids, bases and fuels.

Nanotechnology-based insulation, chemical and flame resistant coating. 2-part water-based epoxy system. Long-term performance and durability resulting in lower maintenance costs and longer asset life; reduces asset turnover and waste. Color: Grey with pebbled/textured finish. Blue color is available upon request.

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. Ability for each coat to be applied in a thicker layer of approximately 1 millimeter per coat, and built to 1/2" or more.

CHEMICAL RESISTANCE: Resistant to splash contact with a number of chemicals. Fully cured films are resistant to spillage of: 10% Acetic Acid, Toluene, Bleach, Deionized Water, Ethanol, 50% Sodium Hydroxide, 95% Sulphuric Acid, Xylene, Hydrocarbons/Fuels/Oils, 5% Lactic Acid.

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

SURFACE TEMPERATURE REDUCTION: Insulates and reduces surface temperatures, making it an excellent safety coating to use for lowering hot surfaces to OSHA safe-touch levels.

CONTACT/ORDERING:

Phone: 800-767-3998 or +1 239-254-0346

Online: www.nansulate.com

USES:

- ✓ Steam Pipes
- ✓ Tanks
- ✓ Heat Exchangers
- ✓ Boilers
- ✓ Industrial Ovens
- ✓ Pipelines
- ✓ Dyeing Machines
- ✓ Safe Touch Application on Hot Equipment
- ✓ Valves, Joints and Other Formerly Difficult To Insulate Areas
- ✓ Other High Temperature Surfaces

BENEFITS:

- ✓ Energy savings
- ✓ Reduces carbon emissions
- ✓ Can be applied while in service
- ✓ Cost effective, with long-term savings and short payback period (Reported at 6-18 months)
- ✓ Non-toxic, water-based, low VOC
- ✓ Excellent chemical resistance
- ✓ Flame resistance
- ✓ Easily applied by texture sprayer, trowel or brush
- ✓ Ideal for equipment that is not easily insulated by rigid or fibrous insulation
- ✓ Heavy duty, rugged surface
- ✓ Can be painted over
- ✓ Corrosion prevention, as part of the UIS system with the EPX NanoPrime™.
- ✓ 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 40 mils/1000 microns wet film thickness (1 coat) over 76 square feet (7.06 square meters) of surface area, depending on surface.
Coverage rate for typical application thickness for One Gallon (3.79 liters)	Yields approximately 80 mils/2000 microns wet film thickness (2 coats) over 38 square feet (3.5 square meters) of surface area, depending on surface.
Typical applied coat thickness	40 mils wet film thickness (1000 microns) per coat
Typical cured dry film thickness (DFT) of 1 coat	24 mils (600 microns) DFT
Thickness required for primer (EPX NanoPrime™)	4 coats, each coat applied at 4 mils (100 microns) wet film thickness.
Typical touch dry time for 1 coat at ambient	2-3 hours
Typical touch dry time for 1 coat on 100C+ surface	20-45 minutes
Typical hard dry time	24-48 hours
Typical full cure time	15-45 days, dependent upon applied thickness and environmental variables
Shelf life	1 year, from date of manufacture
VOC content of mixed system	14 g/L (calculated)
Viscosity of mixed coating	12,000 to 15,000 (cps)
Pot life	2 hours
Weight as packaged (product sold by weight)	2-gallon kit: Part A is not less than 10.5 lbs; Part B is not less than 2.1 lbs 5-gallon kit: Part A is not less than 27.0 lbs; Part B is not less than 5.4 lbs
Tensile Strength - ASTM D-2370	3500 psi, 24000 kpa
Abrasion Resistance	Hard
Flame Spread/Smoke Developed - ASTM E84	Class A
Mix Ratio	All of Part A with all of Part B as packaged
Service Temperature Range	-40F to 400F (-40C to 204C)

LIMITATIONS:

Must use EPX NanoPrime™ as primer when applying to metal and non-porous surfaces
 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 15-45 days.
 Epoxies are not UV resistant; If application is outdoors or subject to UV light, use EPX NanoPrime™ at 1-coat as a top coat.
 Do not rely on visual measurement for coating thickness. Always use a wet film thickness (WFT) gauge in several areas to ensure proper application thickness. See EPX Application and Mixing Instructions for further details.

STORAGE:

Store unopened containers in cool, dry conditions between 40F to 85F (4C to 30C). Keep away from direct heat source. Do not allow to freeze in can. Unused mixed portions cannot be stored and reused, as EPX has a pot life of 2 hours from the time Part A and Part B are mixed. The product cannot be used after the pot life expires.

NOTE ABOUT CURE TIME:

The product reaches full insulating ability after a cure time of approximately 15-45 days, which is dependent upon thickness and environmental variables. Test of thermal performance should be performed after full cure. Thermal benefits will typically begin to be seen approximately two days after application, and will continue to improve as the cure time completes. Final cure is complete when thermal performance has reached a steady state.

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