TNEMEC

PRODUCT DATA SHEET

AEROLON ACRYLIC SERIES 971

PRODUCT PROFILE

GENERIC DESCRIPTION Fluid-applied acrylic insulation coating

COMMON USAGE An innovative, fluid-applied, thermal insulating coating utilizing aerogel particles that imparts exceptional insulative properties to a variety of substrates. Ideal for insulating pipes, valves, tanks, structural steel, or other substrates where thermal improvement or personnel protection is desired. Part of a durable, corrosion-resistant coating system that bonds to the substrate, greatly reducing the issues associated with corrosion under insulation (CUI) and mitigating thermal bridging by controlling condensation.

COLORS 1278 Insulation Yellow, WH13 White.

FINISH Matte

SPECIAL QUALIFICATIONS Thermal Conductivity (ASTM C518 at 77°F): 0.0356 W/m-°K or 0.2468 BTU-in/ft²-hr-°F (R value at one inch equals 4.1)
Flame Spread (ASTM E84): Class A
Smoke Developed (ASTM E84): Class A
Tested in accordance with NORSOK M-501/ISO 20340

Series 971 meets the requirements of LEED-Low-Emitting Materials, Collaborative for High Performance Schools-Paints & Coatings, WELL Building Standard-VOC Restrictions, and Living Building Challenge–Healthy Interior Performance. Contact your Tnemec representative for more information.

COATING SYSTEM

PRIMERS **Steel:** Series 1, 90E-92, 90-97, 90G-1K97, 90-98, 91-H_2O, 94-H_2O, 115, 118, 135, 394, 1220, 1224. **Note:** The use of zinc-rich primers is not generally recommended when in-service temperatures exceed 120°F (49°C). Reference NACE SP0198 for more information.
Galvanized Steel and Non-Ferrous Metal: Series 115, 1224
Concrete: Series 154, 1220, 1224
CMU: Series 1224
Note: Refer to appropriate primer data sheet for maximum temperature resistance.

TOPCOATS Series 22, 27WB, 72T, 115, 154, 1028T, 1094, 1095, 1096, 1224. Other topcoats may be available, contact your Tnemec representative for more information. **Note:** A cure time of 24 hours at 75°F (24°C) is required before topcoating Series 971. Extended cure time may be required at lower temperatures.

SURFACE PREPARATION

GALVANIZED STEEL & NON-FERROUS METAL Surface preparation recommendations will vary depending on substrate and exposure conditions. Consult the latest version of Tnemec Technical Bulletin 10-78 or contact your Tnemec representative or Tnemec Technical Services.

ALL SURFACES Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS 76 ± 2.0% (practical) †

RECOMMENDED DFT 30.0 to 50.0 mils (762 to 1270 microns) per coat. **Note:** For use as a thermal break, recommended total dry film thickness is 80 to 100 mils (2032 to 2540 microns). Thickness may vary by project. **Note:** Multiple coats may be required, please contact your Tnemec Representative for film thickness recommendations.

CURING TIME

Temperature	To Touch	To Handle	To Recoat†	To Topcoat
95°F (35°C)	45 minutes	8 hours	9 hours	12 hours
75°F (24°C)	2 hours	16 hours	18 hours	24 hours
45°F (7°C)	4 hours	24 hours	28 hours	36 hours

†Recoat times listed are with itself. Curing time varies with surface temperature, air movement, humidity and film thickness.

VOLATILE ORGANIC COMPOUNDS 0.016 lb/gallon (1.9 grams/litre) †

HAPS 0 lb/gal solids

THEORETICAL COVERAGE 1,219 mil sq ft/gal (30.0 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS One

PACKAGING Five-gallon pail yielding 3.5 gallons (13.25 L) and one-gallon can yielding 0.70 gallons (2.65 L).

NET WEIGHT PER GALLON 4.71 lbs ± 0.25 lbs (2.14 ± 0.11 kg) (mixed) †

STORAGE TEMPERATURE Minimum 40°F (4°C) Maximum 110°F (43°C)
PROTECT FROM FREEZING.

TEMPERATURE RESISTANCE (Dry) Continuous 325°F (163°C)

SHELF LIFE 12 months at recommended storage temperature.

FLASH POINT - SETA >230°F (110°C)

HEALTH & SAFETY Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product.
Keep out of the reach of children.

AEROLON ACRYLIC | SERIES 971

APPLICATION

COVERAGE RATES

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Minimum	30.0 (762)	40.0 (1016)	41 (3.8)
Maximum	50.0 (1270)	65.0 (1650)	24 (2.3)

Practical coverage rates. Allow for overspray and surface irregularities. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance. †

MIXING

Mix thoroughly under low agitation. A box blade (H-paddle) is recommended.

THINNING

Not normally required. May thin with clean water up to 1.5 ounces (45 mL) per gallon when needed to adjust viscosity.

APPLICATION EQUIPMENT

Refer to the Series 971 Application Guide or contact Tnemec Technical Services for specific application information.

SURFACE TEMPERATURE

Minimum 45°F (7°C) Maximum 200°F (93°C)
The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

CLEANUP

Flush and clean all equipment immediately after use with clean water.
† Values may vary with color.

NOTICE

Aerolon performance data, thermal modeling, and construction details are provided as a convenience to the architect, engineer, building owner, and applicator to aid in product selection. This information is based on standardized tests and specific construction designs that may not pertain directly to each building, structure, vessel, or project. Use and placement of the product, and product performance estimations shall be reviewed and approved by the project's design professional.