



# AEROLON<sup>®</sup>



**WORKSITE  
SAFETY &  
PROTECTION**

## THERMAL INSULATING COATING

### PRODUCES A SAFER WORKSITE ENVIRONMENT

Tnemec has combined its leading, high-performance coatings technology with the world's best insulating solid (aerogel) to produce Aerolon. With an ultra-low K-value rating, Series 971 Aerolon Acrylic minimizes high-heat transfer from one side of a material to the other.

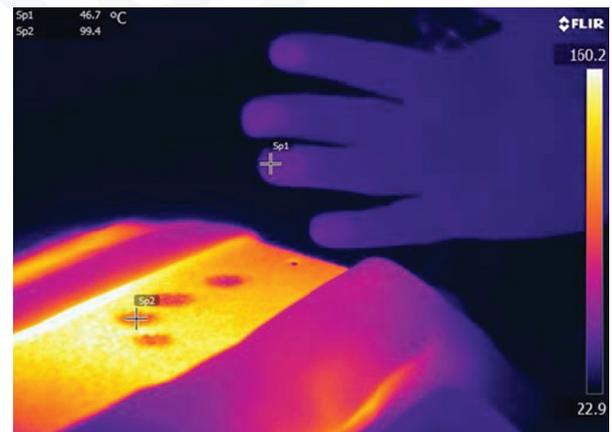
Effectively controlling thermal exchange at the substrate surface is a major advantage in preventing work-related, contact-burn accidents, as well as resulting injuries. Just one coat of Aerolon provides enough protection to well exceed specified standards.

Aerolon's spray-application makes it an ideal choice for use on irregular shapes that would otherwise be difficult to insulate or wrap. Combined with its exceptional thermal insulation qualities, Aerolon offers a viable personnel protection solution for facility and safety managers.

## SAFE TOUCH DEMONSTRATION

The American Society for Testing & Materials (ASTM) C1055 acceptable limit in industrial environments for skin contact exposure at 140°F (60°C) is 5 seconds. However, ASTM C1057 recognizes that tissue damage is not only the result of surface temperature and exposure time, but also the amount of energy transferred. This infrared image shows fingerprints after touching a hot plate that was coated with Aerolon and held at a constant temperature of 350°F

(177°C). Even though the surface temperature is lowered by just 10% – far from a temperature considered safe – it feels much cooler. The fingers act as a heat exchanger, cooling the Aerolon surface faster than the substrate heat can pass through the coating. In this example, with a 5-second contact, there's only a slight increase in fingertip temperature, not enough to cause a burn. (For more details, refer to Tnemec Technical Bulletin No. 12-97.)



# PROJECT PROFILE

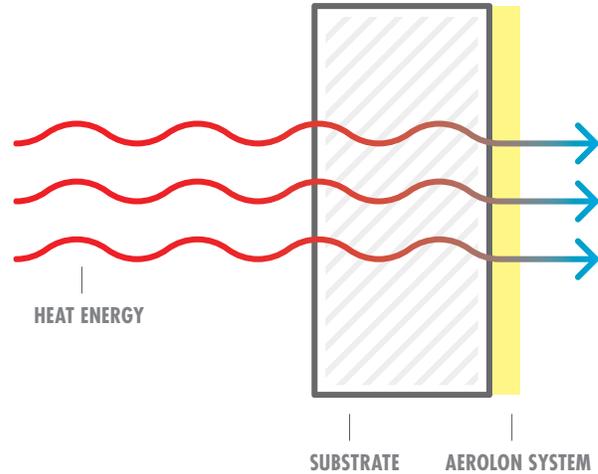
## WASTEWATER TREATMENT BUILDING PROJECT

When infrastructure in this wastewater treatment plant required maintenance, the facility turned to Tnemec to cover their floors, walls, ceilings and everything else in between. Part of the project's scope included how to protect its workers from five hot air blowers and their piping. The city needed a coating that would combat corrosion and assist in protecting personnel from the hot temperatures of the exposed equipment.

After being hand-sanded and primed with a water-based epoxy coating, Aerolon was spray-applied while the blowers were still hot and was followed by a finish coat of an acrylic polymer. The resulting surface was more durable and safe; less likely to create any work-related accidents.

# RATE OF TRANSFER

Aerolon effectively controls heat energy exchange at the substrate surface and creates a 5-second "safe touch" burn protection.



## PERFORMANCE PROVEN BY COMPARISON

In side-by-side comparisons, Aerolon's beneficial combination of insulating and protective properties represent a more effective solution than virtually all other available options.

When applied to piping, tanks or steel in industrial facilities, refineries, manufacturing plants or water treatment plants...

### AEROLON PROVIDES:

- Personnel safety/protection from hot surfaces
- Increased thermal efficiency and energy savings
- Exceptional Corrosion Under Insulation (CUI) resistance
- Excellent substrate bonding and durability
- Superior condensation control characteristics
- Greater ease of application (including trouble-free, labor-saving touchup/repair)

**INNOVATION IN EVERY COAT™**



Tnemec Company Incorporated 6800 Corporate Drive Kansas City, Missouri 64120-1372 1-800-TNEMEC1 Fax: 816-483-3969 tnemec.com

Published technical data and instructions are subject to change without notice. Contact your Tnemec technical representative for current technical data, instructions and pricing. Warranty information: The service life of Tnemec coatings will vary. For warranty, limitation of seller's liability and product information, please refer to Tnemec Data Sheets at [www.tnemec.com](http://www.tnemec.com) or contact your Tnemec technical representative. Printed in USA. © Tnemec Company Inc. 2016 FLYAEROS HW2.5M416