

# Thermal insulation barrier providing corrosion protection with “cool-to-touch” properties



# 5871



Belzona 5871 is a novel, two-component, polymeric, solvent free system providing a thermal insulation barrier with corrosion protection and thermal and sub-zero “cool-to-touch” properties.

This material has been designed to be applied onto areas including metal pipework, ducting and other industrial equipment. Belzona 5871 is thermally insulating, providing protection against contact-burn injuries, whilst also eliminating corrosion and problems associated with CUI, condensation and icing, all resulting in improved safety, durability and efficiency.

Belzona 5871 can be applied by brush, cartridge or plural spray, expanding upon application to produce a lightweight, closed-cell foam. This reduces the surface temperature of metallic substrates to below 60°C (140°F) whilst providing corrosion protection.

TECHNICAL DATA	Mixing Ratio (Base : Solidifier)	2 : 1 by volume	2.3 : 1 by weight
	Working Life	20 minutes at 20°C (68°F)	
	Cool-To-Touch Surface (ASTM C1055)	Belzona 5871 can be used to prevent contact-burn injuries by reducing the surface temperature of metallic substrates to below 60°C (140°F)	
	Thermal Conductivity (EN 12667/ASTM C177)	When tested at temperatures ranging from -40 to 150 °C (-40 to 302 °F), the thermal conductivity varied between 0.0645 to 0.0874 W/m·K	
	Corrosion Under Insulation (CUI)	Belzona 5871 will show no signs of failure after 1000 hours simulated CUI, cycled between 60°C (140°F) and 120°C (248°F), with alternating, hourly dry and wet periods.	
	Salt Spray (ASTM B117)	Belzona 5871 tested as one-coat system (at 3mm cured thickness), cured at 20°C/68°F and post cured at 120°C/248°F respectively, will show no signs of failure after 4500 hours continuous exposure.	
	Water Immersion (ISO 2812-2)	Belzona 5871 tested as a one-coat system (3mm cured thickness) will show no signs of failure after 4500 hours (20°C/68°F cure)	
UV Stable + Fire Resistance	When used in conjunction with Belzona 3211		

CURE TIMES	Temperature	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
	Return to Service	36 hours	24 hours	16 hours	12 hours	8 hours

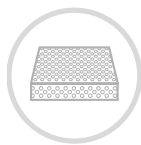
\*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.



**CORROSION RESISTANT**



**BRUSH AND SPRAY-APPLIED**



**LIGHTWEIGHT FOAM**



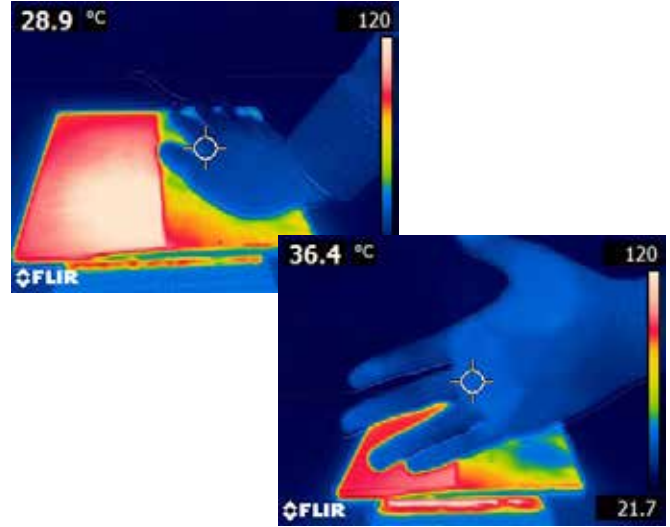
**COOL-TO-TOUCH**



**THERMAL INSULATION**

## Key Benefits:

- Excellent resistance to corrosion/CUI**  
 This insulation barrier offers outstanding corrosion resistance at ambient, elevated and sub-zero temperatures.
- Brush and spray applied**  
 Belzona 5871 can be easily applied onto both small, complex geometries or over a large area.
- Improved safety**  
 Thermal and sub-zero cool-to-touch properties provide worksite personal protection and safety against contact-burn injuries.
- Thermal efficiency**  
 Belzona 5871 reduces the amount of heat transfer through a surface, increasing the efficiency of equipment.



Single layer of Belzona 5871 reducing heat transfer and preventing thermal burns

## Application Areas:

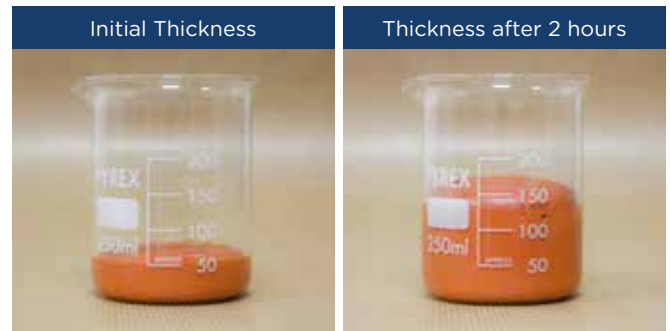
- Pipework
- Ducting
- Tank/Vessel externals
- Industrial machinery and equipment



Application onto a seal pot

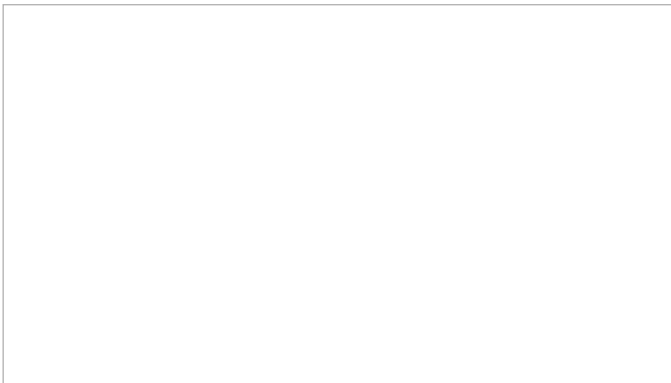
## Foam Growth Technology:

Upon full cure, novel foaming epoxy technology allows Belzona 5871 to expand up to 3 times the thickness at which it was originally applied, reducing the number of layers needed compared to conventional coating systems. Closed-cell foam growth creates an insulating barrier to prevent heat loss, surface burns and corrosion/CUI.



Belzona 5871 foam expansion after 2 hours

For more information, please contact your local Belzona representative:



### QUALITY PRODUCTS - TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.