

PC[®] 136S ADHESIVE

Product Datasheet

1. Description and Area of Application

PC[®] 136S adhesive is a two component adhesive formulated for use with FOAMGLAS[®] insulation. It is particularly suited for use as a fabrication adhesive for construction of FOAMGLAS[®] insulation billets that will be used to make insulation components for stainless steel piping and equipment.

The product has a wide service temperature range, and it is certified to meet the stringent stainless steel services requirements of MIL-I-24244, ASTM C795 and NRC Regulatory Guide 1.36.

It cures to an elastomeric solid at room temperature, and is easily cut with a wire saw and other commonly used fabrication equipment.

2. Field Application

Always read and understand information contained within product datasheets and safety datasheets before attempting to use this product. If you have questions regarding fitness of use of this product for an application, consult Pittsburgh Corning LLC.

Environmental Considerations

Temperature of adhesive, FOAMGLAS[®] insulation and the ambient temperature will affect working time, cure and application rate. Higher temperatures will reduce working time, viscosity and cure. Lower temperatures increase viscosity and lengthen the working time and cure.

Mixing Guidelines

DO NOT thin. Blocks of FOAMGLAS[®] insulation should be readily available in the work area before application of the adhesive to allow efficient use of the adhesive. Once adhesive is mixed the curing process will begin and is irreversible.

Premix each component for 1 to 2 minutes. Combine Part A and Part B into a clean container and mix for 5 to 7 minutes. If less than a full kit is needed, carefully measure equal portions by volume of Part A and B into a clean container to obtain the amount of adhesive needed then mix 5 to 7 minutes. The PC[®] 136S adhesive mix ratio is one to one by weight. The recommended mixer paddle for PC[®] 136S adhesive is available from Pittsburgh Corning. DO NOT use ribbon type mixing paddles or any type of mixing paddle that may entrain air into the adhesive mixture.



Cellular Glass Application Guidelines

PC[®] 136S adhesive is self-leveling which aids in the application. Apply the PC[®] 136S adhesive to the surface of a FOAMGLAS[®] insulation block using a trowel or brush to achieve the recommended application rate. Apply adhesive to the entire face of the FOAMGLAS[®] insulation block.

This will be the mating surface for the next insulation block of the billet assembly. Place a second, uncoated, FOAMGLAS[®] insulation block in position on the surface of the adhesive coated block and press and rotate firmly then align the edges and allow the assembled billet to set in place. If additional pieces of FOAMGLAS[®] insulation are to be laminated to the billet assembly this may be done immediately.

It is critical that the entire mating surface of the FOAMGLAS[®] insulation must be covered with adhesive so that all resulting fabrication joints will be completely sealed with adhesive. Any excess adhesive must be removed from the sides of the billet before the adhesive sets. Excess adhesive on the sides of the billet may result in fit or closure issues in the field when fabricated pieces are installed.

Billets formed with PC[®] 136S adhesive are ready to use in 16 to 24 hours.

Cleanup and Disposal

Allow the PC[®] 136S adhesive to cure then peel, scrape, or rub the cured adhesive off. Uncured product can be removed or cleaned using mineral spirits, acetone, or ethanol based solvent.

Dispose of excess adhesive and containers in accordance with local, state and federal regulations.

3. Type of Delivery and Storage

- Kit is composed of two components:
 - Part A: 13.1 L (3.5 gal) in pail
 - Part B: 12.8 L (3.4 gal) in pail
- Shipping Weight per pail: 19.5 kg (43 lb.)
- Store original, unopened containers in a cool, dry area.
- Optimum storage temperature is 25 ± 5 °C (77 ± 9 °F)
- Protect unopened containers from water, heat and direct sunlight.
- Consult Safety Datasheet for additional storage and handling information.

4. Coverage

Standard application of adhesive to FOAMGLAS[®] insulation:

- One kit (Part A + B) is sufficient to form approximately 92 FOAMGLAS[®] insulation block to block bond joints when using standard format (450 x 600 mm or 18 x 24 in.) block or approximately 61 block to block bond joints when using large format (18 x 36 in.) block.
- Standard application requires 1.0 L / m² (2.5 gal / 100 ft²) or 1 m² / L (40 ft² / gal)
- Figures do not include losses.

5. Typical Properties

| PROPERTY ^A | METHOD | SI | ENGLISH |
|--|-------------------------------|------------------|--------------------------------|
| COLOR | | | Dark Gray |
| DENSITY | | ~ 1.4 kg / L | ~ 11.8 lb / gal |
| APPLICATION TEMPERATURE | | | |
| MATERIAL | | 28 ± 7 °C | 82 ± 12 °F |
| SURFACE (MAXIMUM) | | 38 °C | 100 °F |
| SURFACE (MINIMUM) | | -52 °C | -62 °F |
| SERVICE TEMPERATURE ^B | | | |
| MAXIMUM | | 343 °C | 650 °F |
| MINIMUM | | -101 °C | -150 °F |
| TENSILE STRENGTH | ASTM D412 | 3.41 MPa | 495 psi |
| ELONGATION AT BREAK | ASTM D412 | | 150 % |
| DUROMETER HARDNESS | SHORE A ASTM C661 (7 DAYS) | | 50 |
| WORKING TIME | | | 1 to 2 hours |
| CURE TIME / FULL SET-UP | | | 16 to 24 hours @ 24 °C (75° F) |
| VOLATILE ORGANIC CONTENT (VOC), MAXIMUM LESS WATER AND EXEMPT ^C | | 6.0 g / L | 0.05 lb / gal |
| WATER VAPOR PERMEABILITY ^D | ASTM E96 (Wet Cup) | 0.25 ng / Pa·s·m | 0.16 perm-in |
| | ASTM E96 (Dry Cup) | 0.22 ng / Pa·s·m | 0.12 perm-in |

^A Properties subject to change. Consult Pittsburgh Corning.

^B Service temperature limits are derived from laboratory evaluation of the product. Variations in substrates, loading conditions, or other external factors may further limit service temperature. Always consult Pittsburgh Corning FOAMGLAS® Insulation System Specification for suitability for use recommendations for a specific application.

^C Adhesive is certified to meet the general requirements for VOC emissions of SCAQMD Rule 1168, July 1, 2005, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168.

^D Material tested as cured disk.

Adhesive is certified to meet stainless steel service requirements of MIL-DTL -24244D (SH) and ASTM C795.

6. Limitations

- DO NOT use in areas subject to continuous immersion.

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