

# FOAMGLAS® PFS Pool Fire Suppressant PRODUCT DATA SHEET

**FOAMGLAS**  
Industry

IMPORTANT: MATERIAL SAFETY DATA SHEETS ARE AVAILABLE AND SHOULD BE READ BEFORE USING THIS PRODUCT.

## DESCRIPTION:

FOAMGLAS® PFS Pool Fire Suppressant is a pre-packaged insulation dispersal unit (bag) constructed using multiple pieces of FOAMGLAS® insulation, shrink wrapped and covered in a UV resistant polyethylene bag.

Made of glass without fillers or binders, cellular glass insulation, the core material of the FOAMGLAS® PFS Pool Fire Suppressant, is inorganic and consequently entirely non-flammable. The closed cell structure of cellular glass makes it impermeable to moisture in both liquid and vapor form. This has led to the wide use of cellular glass insulation on piping and equipment requiring fire protection.

Cellular glass also has low coefficients of expansion and thermal conductivity. This unique combination of properties - closed cell structure, inorganic composition and low coefficient of expansion – also renders the material a particularly effective tool for use in LNG pool fire suppression. These properties result in a material that maintains its buoyancy despite extreme temperature conditions. Because it is entirely inorganic, in the event of a pool fire, cellular glass will not burn or produce smoke.

## HOW IT WORKS:

When the FOAMGLAS® PFS Pool Fire Suppressant units are in place, during an LNG pool fire the poly ethylene bag and shrink wrap are consumed. This releases the individual pieces of FOAMGLAS® insulation which float on the surface of the liquid. As the pieces of insulation spread over the surface of the LNG, the surface area available to the fire for burning is reduced. Flame height and thermal radiation is reduced as a result. Test results have shown that the presence of 200mm (7.9 in.) of cellular glass on the pool surface can achieve up to 95% reduction in thermal radiation, and facilitates extinguishing the fire using appropriate fire control systems.



## \*TYPICAL PROPERTIES:

PROPERTY	
Color:	Green
Density kg/m <sup>3</sup> (lbs/ft <sup>3</sup> ):	112 (7.0) ± 5%
Dimensions mm: (in.):	194 x 220 x 191 7.62 x 8.66 x 7.50
Required Units per m <sup>2</sup> (ft <sup>2</sup> ):	24.8 (2.3)
Target Depth of Units mm (in.):	200mm (7.9)

\* Properties subject to change. Consult Pittsburgh Corning Corporation

## SURFACE PREPARATION:

FOAMGLAS® PFS must be installed such that the bottom of the spill containment area is covered with approximately 22 units per m<sup>2</sup> FOAMGLAS® PFS units (2 units per ft<sup>2</sup>) plus 10% additional on top of the bottom layer for an approximate total of 24.8 units per m<sup>2</sup> (2.3 units per ft<sup>2</sup>). To allow for proper drainage of rain or other water such as deluge system water that may enter the containment area, FOAMGLAS® PFS shall be installed over an elevated metal grate. The grate shall be elevated a minimum of 5 cm (2 in.) or a height sufficient to allow for the maximum expected depth of storm or deluge water.

## APPLICATION:

Starting at one end of the spill containment pit, place the FOAMGLAS® PFS units in loose rows to the ratio of 22 FOAMGLAS® PFS units per m<sup>2</sup> (2 units per ft<sup>2</sup>). Place the FOAMGLAS® PFS units directly on the metal grate, with the bag seal on top. Allow

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approximately 25mm (1 in.) of space between each bag. Continue with subsequent rows as above, placing FOAMGLAS® PFS units approximately 25mm (1 in.) apart and allow approximately 25mm (1 in.) between rows until the entire bottom of the containment pit is lined with FOAMGLAS® PFS units. Starting from the center of the containment pit, install the remaining FOAMGLAS® PFS units over top of the rows previously installed, so that the remaining units are centered in the containment pit. For further details see Pittsburgh Corning Corporation Specification for Installation of FOAMGLAS® (PFS) Pool Fire Suppressant (I-PFS-07-06-01).

### **PACKAGING:**

LCL carton – 18 Units per carton

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