

Solef[®]



SOLVAY

asking more from chemistry[®]

Solef[®] 80 000 e-PVDF

High Performance Foams

**SPECIALTY
POLYMERS**

Solef® 80 000 e-PVDF Bead Foam

New Solef® 80 000 e-PVDF Foam is an innovative lightweight expanded material that retains the key characteristics of pure polyvinylidene fluoride (PVDF):

- Fire resistance
- Chemical resistance
- UV resistance
- Thermal stability
- Purity
- Low surface energy

and combines these inherent characteristics with:

- Lightweight (density down to 50 g/L)
- Improved thermal insulation
- Increased resilience
- Repeated impact resistance

Manufactured using novel expansion technology, Solef® 80 000 e-PVDF Foam is free of additives and is produced without chemical blowing agents, preserving its inherent purity and inertness characteristics. Solef® 80 000 beads can be molded into complex three-dimensional shapes via steam chest molding, and this imparts new characteristics previously unobtainable using existing materials.

Another advantage of having a three-dimensional part molded in one step, is that (with consistent geometry) the properties are exactly the same in every direction; thermal conductivity and resilient response are the same in 3 dimensions.

Applications that demand high purity and those which require aggressive chemical, fire, UV, and radiation resistance rely on PVDF foam for insulation, sheeting, and other structures.

Solef® 80 000 e-PVDF Foam:

- Passes the Aircraft Flame Tests [FAR 25.853(a), FAR 25.853(d), FAR 25.856(a)]
- Resistance to flame (vertical bunsen)
- Resistance to flame (radiant panel)
- Heat release rate and total heat release
- Flame propagation
- Specific optical smoke density (AITM 2.0007) flaming and non flaming mode
- Toxic Components on Combustion Products (AITM 3.0005) flaming and non flaming mode
- Passes ASTM E84 surface burning, smoke and flame spread
- Resistant to fungi (ASTM G21)

Solef® 80 000 e-PVDF Foam shows a temperature performance range between – 100 to 120 °C (depending on the application).

Typical Industries Include:

- Aircraft
- Automotive
- Bioscience
- Marine
- Oil & Gas
- Pharmaceutical
- Pulp & Paper
- Semiconductor
- Water treatment

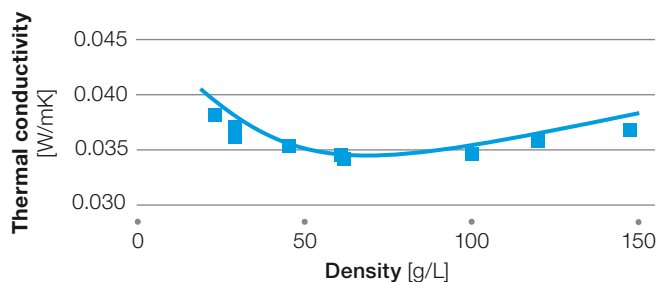


Solef® 80 000 e-PVDF Foam is exclusively molded by JSP, a world leader in engineered plastic foams. Their expertise in foam processing ensures that the most complex design challenges can be met successfully yet cost effectively via traditional production techniques.

Thermal insulation is best in class for polymer foam
– as low as 0.035 W/mK.

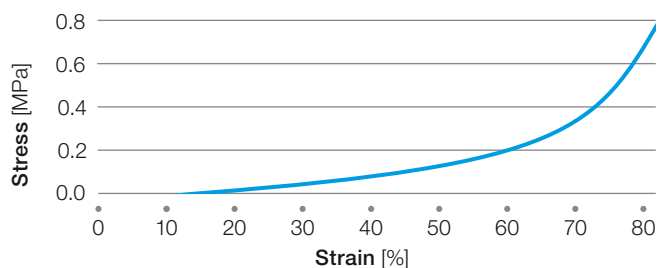


Thermal conductivity of Solef® 80 000 e-PVDF



Quasi-static Compression Performance

Cube 50 mm, PVDF Foam 100 g/l, ISO 844



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