

Polyvinylidene Fluoride (PVDF) is a unique thermoplastic with properties which allow it to be used for very aggressive or highly specialised applications. Although expensive compared to other thermoplastics, PVDF offers an economically attractive alternative to many "exotic" materials and/or in process lines where limited working life of other materials necessitates frequent replacement.

PVDF has excellent chemical and physical properties, even at low temperatures, and has considerable resistance to abrasion. It is resistant to most of the inorganic acids and bases, and to aliphatic and aromatic hydrocarbons, organic acids, alcohols and halogenated solvents. It is also non-toxic and can be used for high purity applications.

Safe working temperatures range from  $-40^{\circ}\text{C}$  to  $+140^{\circ}\text{C}$ , with short term use possible at temperatures well above this level.

PVDF systems are assembled using heat fusion welding, either using socket fittings or butt fusion of pipes and/or fittings end to end. Welding equipment is available for sale or hire and is featured in the tools and installation equipment section.

## application guide

- Temperature range  $-40^{\circ}\text{C}$  to  $+140^{\circ}\text{C}$
- High impact strength
- Abrasion resistant
- Non-toxic
- Resistant to a wide range of acids, alkalis, salts and organic solvents
- Lightweight
- Suitable for high purity applications
- Non-flammable and self extinguishing

- Welding equipment required

## standards and approvals

BS EN ISO 10931:2005

## section guide

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