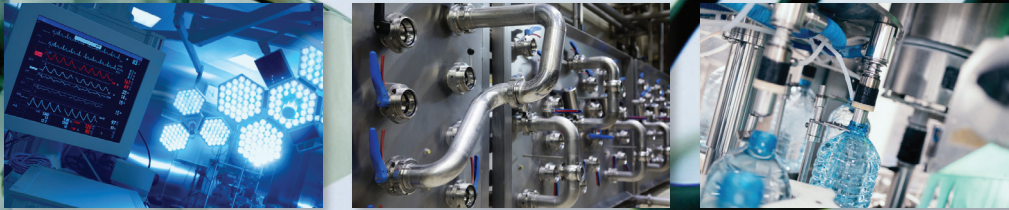


E75F1 & E85F1

A NEW GENERATION OF CIP/SIP COMPATIBLE ELASTOMERS



Our newly developed compounds E75F1 and E85F1 have optimized chemical resistance, giving them long life in polar solvents, steam and hot water, and are suitable for contact with alkaline cleaning fluids.

Ideal for dairy and life sciences applications, sealing compounds E75F1 and E85F1 maximize the usability of EPDM in food, beverage and processing applications, and are specifically engineered to provide extended life in the harshest CIP and SIP regimes.

Trelleborg Sealing Solutions has been involved in sealing food, beverage and life sciences applications since the 1960s and focuses on meeting new challenges with revolutionary products and materials, exceeding the most stringent industry standards. Based on this unrivalled experience, we have developed an outstanding range of sealing materials and products for these industries and Ethylene Propylene Diene Rubber (EPDM) materials E75F1 and E85F1 are the latest additions.

With high chemical resistance, peroxide-cured E75F1 and E85F1 are the best choices in liquid dairy applications and Water-for-Injection (WFI) applications at high temperatures. Engineered to achieve enhanced chemical and thermal stability, they demonstrate long life in polar solvents, steam and hot water and are compatible with alkaline cleaning fluids in Cleaning-in-Place (CIP) and Sterilized-in-Place (SIP) applications. Containing the smallest amount of softener and process aids possible, potential leach out is kept to a minimum, lowering the risk of contamination.

Application

- Separators
- Decanters
- Valves
- Seat valves, double-seated valves
- Pipe couplings
- Aseptic flange connections
- Filling machines
- CIP/SIP cleaning equipment
- Dialysis machines
- Respiratory devices
- Drug delivery systems
- Lab equipment

Special Features

- Suitable for injection and compression molding.
- Meets all relevant approvals and certifications, including:
 - FDA 21 CFR 177.2600
 - 3-A Sanitary Standard 18-03, Class I
 - EC 1935/2004
 - USP Chapter 87 and Chapter 88, Class VI
 - DIN EN ISO 10993-5
 - ADI free

MATERIAL DATASHEET FOR E75F1 & E85F1

General data	E75F1	E85F1
Basic polymer	EPDM	EPDM
Color	black	black
Hardness	70 +/- 5 Shore A	80 +/- 5 Shore A
ASTM code	M 3 DA 710 A26 B36	M 3 DA 810 A26 B36
Temperature range	-45 °C to +150 °C -49 °F to +302 °F	-45 °C to +150 °C -49 °F to +302 °F

Properties	Standard	Specification		Unit
		E75F1	E85F1	
Density	DIN EN ISO 1183-1	1.20 +/-0.02 0.043 +/-0.0007	1.22 +/-0.02 0.044 +/-0.0007	g/cm ³ lb/in ³
Tensile strength		≥ 8.0 ≥ 1,160	≥ 8.0 ≥ 1,160	MPa psi
Elongation at break		≥ 150	≥ 125	%
Compression set				
24 h / 150 °C, 24 h / 302 °F	DIN ISO 815-1 A	≤ 25	≤ 30	%
Low temperature behavior				
TR point	DIN 53 545	< -50 < -58	< -50 < -58	°C °F
TR 10 point	TBS 00036	< -40 < -40	< -40 < -40	°C °F
TG point	ISO 11357	< -50 < -58	< -50 < -58	°C °F

Results of suitability with CIP/SIP media

