

CHEMFLON 165

High quality gasket material composed of modified PTFE reinforced with a high-strength thermally resistant fibrous filler. The special manufacturing process results in excellent mechanical and sealing properties, which are isotropic in the gasket plane. CHEMFLON 165 complies with DIN technical delivery conditions for PTFE-based gasket sheets DIN 28091-3 TF-G-O

Applications

Tailored for use with aggressive media in the chemical, petrol-chemical, pharmaceutical, paper and food industry, and whenever fugitive emissions control is required: i.e. toxic, polluting or high value media. Suitable for all chemicals, with the exception of molten alkali metals, fluorine gas, hydrogen fluoride and materials that may generate these.

Technical Data (values relate to 2 mm thickness)

| | | | |
|--|-----------------------|-------------------|-------------------|
| Density | ASTM D 792 | 2.25 | g/cm ³ |
| Service limits (recommended)*: Continuous service temperature range | | -200 ÷ +260 | °C |
| | Max. service pressure | 80 | bar |
| | Chemical application | 0 ÷ 14 | pH |
| range | | | |
| Compressibility | ASTM F 36 | 7 ÷ 15 | % |
| Recovery | ASTM F 36 | 45 | % |
| Creep relaxation (20 MPa, 100°C, 22 hrs) | ASTM F 38 | 25 | % |
| Stress retention (30 Mpa, 150°C, 16 hrs) | DIN 28091-52913 | > 12.5 | MPa |
| Tensile Strength | ASTM D 1457 | > 12 | N/mm ² |
| Gas permeability (N ₂ , 40 bar, 30 MPa) | DIN 3535/4 | < 0.02 | ml/min |
| Compression Strength σ_0 Room Temp.: | DIN 28090 | 220 | N/mm ² |
| " " " σ_{BO} at 100°C: | " | 80 | N/mm ² |
| " " " σ_{BO} at 200°C: | " | 50 | N/mm ² |
| Gasket factors: Min. gasket assembly stress $\sigma_{VU/0.1}$ | DIN 28090 | 15 | N/mm ² |
| Maintenance factor $m_{0.1}$ | | 2 | |
| Gasket factors according to ROTT test - future standard procedure for ASTM / ASME code | | | |
| thickn Gb: | 2.2 | N/mm ² | |
| ess: a: | 0.28 | | |
| 1.5 Gs: | 10-6 | N/mm ² | |
| mm: | | | |
| ex.: assembly stress with RF flange 10" 150 lbs, RT, with nitrogen at: | 5 bar | 20 bar | 40 bar |
| | 5 | 8 | 13 |
| | | | 80 bar |

* Service limits are indicated for proper assembly conditions and gasket design. Max. temperature and max. pressure must not occur simultaneously.

Supply data:

Color: white-cream

References: Standard sheet 1500 x 1500 mm upon request: 1500 x 1500 mm
 size: Standard 1.5 & 3.0 mm tolerances according to DIN 28091

- TOTAL-ELF-FINA (F): approval for use with steam and chemicals
- AIR LIQUIDE (F): approval for fire resistance EN ISO 11114-3 and for mechanic resistance NF EN 1797-1
- FDA 21 CFR/175.300 for use with alimentary
- ENICHEM (I): approval for use with chemically aggressive media at medium-high temperature (TM2)

CHEMFLON® jointing manufacture is quality assured in accordance with ISO 9001

Data here reported, corresponding to laboratory and field tests typical results, are meant as non-binding guideline for gasket selection. No guarantee claim can be inferred from these data. When needed, we shall be pleased to assist you with specific technical assistance.