

# Leader Clipperlon 2120

## Modified PTFE Gaskets

### DESCRIPTION

Modified PTFE gasket material containing biaxially oriented chains to obtain a tight seal for demanding applications. Clipperlon 2120 is a very dense material with low compressibility, high recovery, and low creep properties. Off-white in color and produced with modified PTFE and barium sulfate filler.

### APPLICATION

Particularly suitable for use with hydrofluoric acid and a wide variety of different media across the whole pH range. Applications can be found in chemical, pharmaceutical, food and beverage, and general industry. Due to the high density, this material is highly recommended for applications with monomers to avoid the 'popcorning' effect. This effect will result when the monomer enters the microvoids of the PTFE.

### CHEMICAL COMPATIBILITY

Particularly suitable for use with hydrofluoric acid but not pure hydrogen fluoride. Best for use with strong alkalis, solvents, fuels, water, steam, and chlorine. Other applications include solvents, fuels, water, oil, chlorine, and caustics. A chemical resistance list is available upon request. Pressure up to 1200 psi. Temperature from -450°F up to 500°F.

### AVAILABLE OPTIONS

Flange gaskets and sheets are available in thickness of 1/32", 1/16", and 1/8". Other thicknesses available upon request. Standard gaskets can be supplied in accordance with ASME B16.21, EN12560-1 as well as EN1514-1. Non-standard or special gaskets can be manufactured according to customer drawings or by given sizes.

### APPROVALS & CERTIFICATES

- FDA 21 CFR 177.1550
- TA-Luft
- EC1935 (10/2011)
- The Chlorine Institute / Pamphlet 95

### SEALING CHARACTERISTICS

- Significant reduced creep (non-cold flow)
- Low leak rate
- Good electrical insulation properties
- Outstanding chemical resistance
- Non-aging
- Excellent sealability for low-torque applications

| TECHNICAL DATA                                                  |             |
|-----------------------------------------------------------------|-------------|
| Maximum Temperature [°F]                                        | 500         |
| Maximum Pressure [psi]                                          | 1200        |
| Density [g/cm <sup>3</sup> ]                                    | 2.8         |
| Leakage Specific Leak Rate [DIN 28090-2] [mg/(s*m)]             | 0.01        |
| Minimum Initial Stress [DIN E 2505 part 2] [N/mm <sup>2</sup> ] | 20          |
| Maximum Initial Stress [DIN E 2505 part 2] [N/mm <sup>2</sup> ] | 150         |
| M-Value                                                         | 3.5         |
| Y- Value [psi]                                                  | 2450        |
| ASTM F36 Recovery [% min]                                       | 40          |
| Gasket Required Flange Roughness [Ra micron]                    | 3.2-6.3     |
| Gasket Required Flange Roughness [RMS]                          | 125-250     |
| Max Seating Stress [Qsmax bei RT EN13555] [n/mm <sup>2</sup> ]  | 100         |
| Tensile Strength (quer) DIN 52910 [N/mm]                        | >=(13) 1885 |

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| TECHNICAL DATA                               |       |
|----------------------------------------------|-------|
| Recommended Seating Stress at Assembly [psi] | 5000  |
| ROTT [Gb]                                    | 432   |
| ROTT [a]                                     | 0.318 |
| ROTT [Gs]                                    | 0.964 |
| Compressibility, [ASTM F36], [%]             | 4-8   |
| ASTM F37 Sealability [ml/min] Sg=1000 psi=30 | 0.22  |
| ASTM F38 Creep Relaxation [%]                | 12    |
| ASTM F152 Average Tensile [psi]              | 2000  |