

PRODUCT DATA SHEET

1.0 SCOPE

- 1.1 This specification describes the Duragraf HP sheet gasket which is a sheet with multiple layers of graphite sheets along with stainless steel foils.
- 1.2 Product Duragraf HP is manufactured for high pressure and temperature applications in power generation, petrochemical and chemical industry.

2.0 CONTENT AND CONSTRUCTION

- 2.1 Content
 - 2.1.1 High purity flexible graphite
 - 2.1.2 316L stainless steel
- 2.2 Construction
 - 2.2.1 Flexible graphite with multiple 50 µm 316SS stainless steel tanged inserts

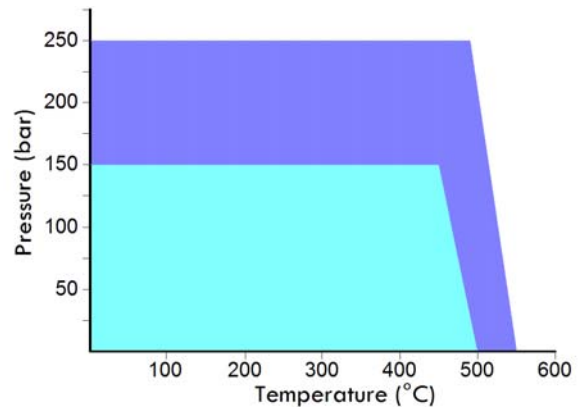
Sheet thickness	1 mm	1.5 mm	2 mm	3 mm
Number of inserts	1	2	3	5
- 2.3 Color
 - 2.3.1 Grey

3.0 TYPICAL PROPERTIES

- 3.1 Pressure and temperature capabilities

	Resistant to compatible fluids
	Resistant in adapted cases, ensure that proper installation procedures are followed
	generally not resistant, consult engineering

*Pressure and temperature capabilities are an indication only.
Always consult Chesterton application engineering when in doubt.*



- 3.2 Physical properties

- 3.2.1 Mechanical tests according to EN 13555 - Thickness 2 mm - Gasket width 20 mm

	Temperature	°C	20°C	300°C	400°C
Residual Stress	P_{gr} at 50 MPa		0.99	0.94	0.92
Maximal surface pressure	Q_{smax}	MPa	> 220	> 220	200

- 3.2.2 Deformation factors DIN28090-2

	ϵ_{ksw}	%	30 - 40
Compression at 20°C			
Recovery at 20°C	ϵ_{krw}	%	4 - 5
Creep compression at 300°C	ϵ_{wsw}	%	< 4
Recovery at 300°C	ϵ_{wrw}	%	4 - 5

- 3.2.3 Gasket factors ASTM

- m factor – 2.5
- y factor – 3000 psi (20.7 N/mm²)

- 3.3 Chemical properties

- 3.3.1 This material can be used in steam and has excellent chemical resistance to practically all chemicals except strong oxidizers.

- 3.4 Approvals

- 3.4.1 Meets Shell Spec MESC SPE 85/203.

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