



# PLANIGRAPH™ PREMIUM LGRP

## Composition

- High-purity expanded mineral graphite Premium Grade with corrosion inhibitor and oxidation retardant with smooth sheet SS316L Th. 0.05 mm

## Characteristics

The expanded mineral graphite of Planigraph™ Premium LGRP meets the requirements of the latest update of the EU directive 2011/65/EC (RoHS) and complies with the requirements of the oxidation test EN 14772 section 6.7.

## Applications

Expanded mineral graphite is also known for its chemical resistance, making it suitable for applications involving almost all fluids except for oxidants.

## Tech Data

Planigraph™ Premium LGRP		
Graphite density	gr/cm3	>1.0
Carbon Content	%	≥ 99.0
Ash Content	%	< 1.0
Sulphur Content	ppm	≤ 100
Chloride Content	ppm	≤25
Fluoride Content	ppm	≤25
Halogen Content	ppm	≤100
Inhibitor of oxidation and corrosion	-	Yes
Thermal Weight Loss 670°C/h	%	≤ 4.0
Tensile Strength	MPa	≥ 4.0
Material of insert	AISI	316L
Thickness of insert	mm	0.05
Compression ratio	%	40 - 50
Recovery	%	> 12
Gas Permeability DIN 3535-6	mg/m/s	< 0.1
Relaxation stress DIN 52913	N/mm2	> 45
Temperature max with steam	°C	550
Temperature max with weak oxidants	°C	450
Temperature min cryo	°C	-196
Maximum assembly load RT	N/mm2	60
Maximum operating pressure	bar	75

- With steam and non-oxidizing fluids, the temperature must be limited to 550°C
- Never use the product to the maximum temperature and pressure associated. Consult the manufacturer for further information
- With weakly oxidizing agents and hot air the temperature must be limited to 450 °C
- Graphite and carbon cannot be used with oxidizing fluids
- Other gasketing sheet dimensions and thicknesses are available on request

Size	1.500 x 1.500	60" x 60"
Thickness	1,5 ÷ 3.0	1/16" ÷ 1/8"



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## Planigraph™ Premium LGRP

The Planigraph™ sales program includes the following items Premium grade and Industrial Grade:

- LGP and LG without insert
- LGRP and LGR with single smooth insert
- LGRFP and LGRF with single or multiple tanged inserts
- LGRHDIP and LGRHDI with multiple smooth inserts

The maximum allowable load on the expanded graphite gasket depends on the type and number of metallic inserts and is strongly correlated with the effective sealing surface area of the gasket. It is always advisable to check the ratio between [De-Di], where De and Di refer to the diameters of the parts of the gasket effectively engaged by the flange compression, and the gasket thickness. The ratio should be at least 4. On WN RF flanges, gaskets can be applied up to the pressure class 300 psi. Please refer to the published technical data sheets for the application limits of the Planigraph™ line products.



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