

## TECHNICAL DATA SHEET

### MACER 333 AF

#### Material profile

The main components are aramid & glass fibres with NBR Binder.

#### Application

Suitable for oils, fuels, lubricants, alcohols, gases, hydrocarbons, steam, water, cooling liquids, most diluted acids and alkalies for high stress conditions.

#### Dimensions of the standard sheets : $\pm 10\%$

1500 x 1500, 1500 x 2000, 1500 x 4000 mm  
Standard Thickness : 0.40 mm to 5.00 mm

#### Thickness Tolerance :

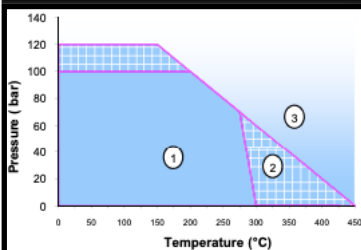
$\leq 1.00 \text{ mm} \pm 0.10 \text{ mm}$  ,  $> 1.00 \text{ mm} \pm 10 \% \text{ mm}$   
combustion engines.

Surface finish : Green Colour (other Colour on Customer requirement)

Specification Compliance : ASTM F 104 Line Call Out : F 712911E12 A9 B3 M5

Max. peak temperature : 450°C

Max. Operating pressure : 120 bar



#### Areas of application

1. Suitable for the application, subject to chemical compatibility.
2. Only for short term temp. excursions
3. Do not install the gasket without technical assistance

#### Physical Properties (Properties applicable for 2.0mm thickness)

Properties	Test Method	Unit	Specified Value
1. Density	ASTM F 1315	g/cm <sup>3</sup>	1.6 - 1.9
2. Compressibility	ASTM F 36 J	%	5 - 15
3. Recovery	ASTM F 36 J	%	$\geq 50$
4. Tensile Strength	ASTM F 152	N/mm <sup>2</sup>	$\geq 10.50$
5. Stress Relaxation (16h, 175°C)	DIN 52913		$\geq 35$
6. Gas Sealability	ASTM F 37B	ml/hour	$\leq 1.0$
7. ASTM Oil no. 3 (5h, 150°C)	ASTM F 146		
Thickness increase		%	$\leq 10$
Weight increase		%	$\leq 10$
ASTM Fuel B (5h, 23°C)	ASTM F 146		
Thickness increase		%	$\leq 10$
Weight increase		%	$\leq 10$
Water (5h, 100°C)	ASTM F 146		
Thickness increase		%	$\leq 10$
Weight increase		%	$\leq 10$

All information & recommendations given in this brochure are correct to the best of our knowledge. However, in view of the wide variety of possible installation & operating conditions one cannot draw the final conclusion in all application cases regarding the behaviour in a gasket joint. Therefore, information can only serve as a guideline.