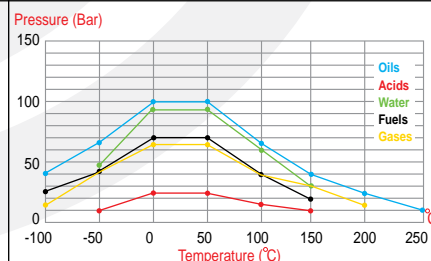


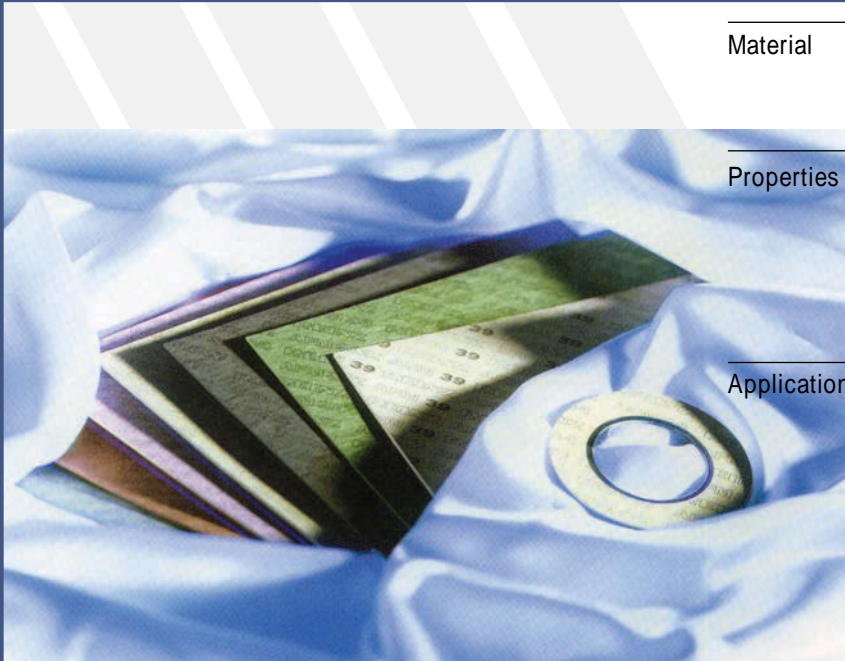


<b>Material</b>	It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.
<b>Properties</b>	AFM 30 is conformable and possesses excellent mechanical / thermal resistance, as shown by its high value of residual stress. It is ideal for sealing off gases and fluids.
<b>Application</b>	* for compressors, pipelines, apparatus, transmissions, gas meters and internal combustion engines  * to seal off transmission, hydraulic, refrigerating and motor oils as well as fuels  * to seal off mixtures of water and antifreeze and corrosion inhibitors  * to seal off Freon, alkaline solutions and solvents

Density	g/cm3	1.75 - 1.95
Ignition Loss DIN 52911	%	< 36
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 12
Tensile Strength DIN 52910 (across grain)	N/mm2	> 9
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	25
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	36
Compressibility ASTM F 36 J	%	7 - 15
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	0.05
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	250
Maximum Continuous Pressure	bar	125
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00-4.00-5.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm





**Material**

It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.

**Properties**

AFM 31 is a highly conformable gasket material featuring high compressibility and flexibility and very good sealability against fluids and gases

**Application**

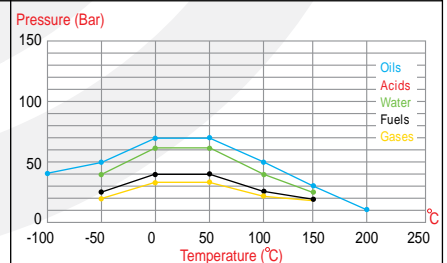
\* pressure is relatively low, e.g. on valve covers, oil pans, covers, in internal combustion engines, compressors, pipelines, apparatus and transmissions.

\* AFM 31 is suitable for sealing off motor, transmission, hydraulic and refrigerating oils, fuels, water, mixtures, of water and antifreeze and corrosion inhibitors

\* For sealing off Freons, alkaline solutions and solvents

Density	g/cm <sup>3</sup>	1.40 - 1.70
Ignition Loss DIN 52911	%	< 45
Tensile Strength ASTM F 152 (across grain)	N/mm <sup>2</sup>	> 8
Tensile Strength DIN 52910 (across grain)	N/mm <sup>2</sup>	> 6
Residual Stress DIN 52913 (16h / 300 C)	N/mm <sup>2</sup>	
Residual Stress DIN 52913 (16h / 175 C)	N/mm <sup>2</sup>	24
Compressibility ASTM F 36 J	%	14 - 23
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.01
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 20
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 15
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 20
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 15
Short Term Peak Temperature	°C	
Maximum Continuous Temperature	°C	250
Maximum Continuous Pressure	bar	80
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm





**Material**  
It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.

**Properties**  
AFM 32/2 exhibits high mechanical and thermal stability as well as high tensile strength. It is also conformable and is particularly suitable for sealing off oils and other fluid substances

**Application**  
\* For sealing joints in internal combustion engines which are subject to high mechanical stress (e.g. intake manifolds, oil pans)

\* For transmissions, compressors, pipelines and apparatus

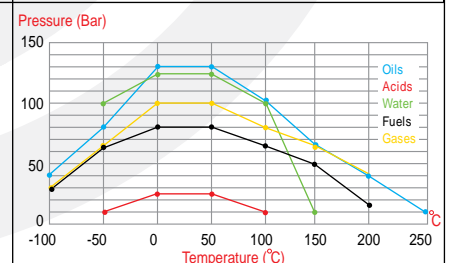
\* For sealing off transmissions, hydraulic, refrigerating and motor oils

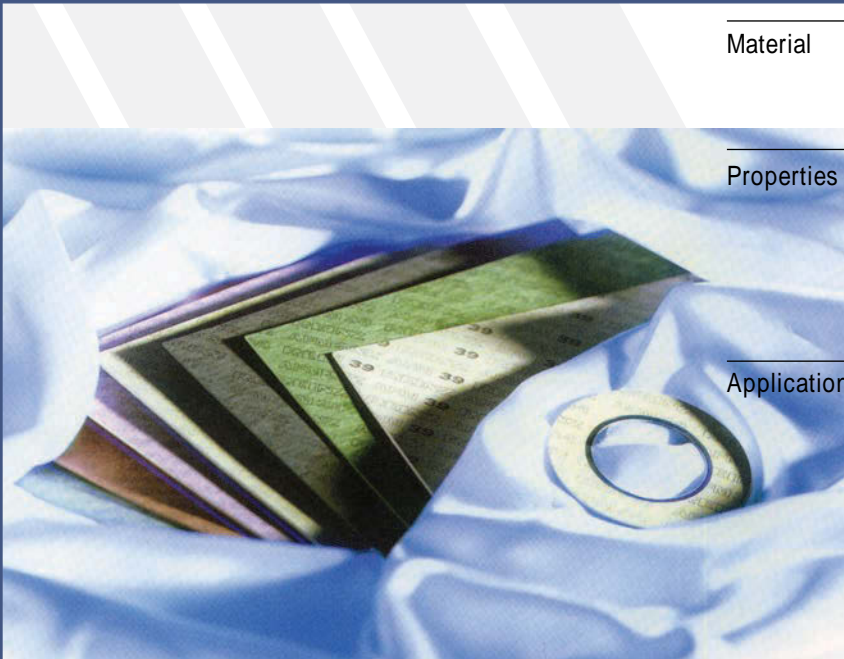
\* For sealing off fuels, mixtures of water and antifreeze and corrosion inhibitors

\* For sealing off Freons, alkaline solutions and solvents

Density	g/cm3	1.60 - 1.80
Ignition Loss DIN 52911	%	< 40
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 15
Tensile Strength DIN 52910 (across grain)	N/mm2	> 12
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	25
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	36
Compressibility ASTM F 36 J	%	7 - 12
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.01
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 8
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 12
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 7
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 15
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	250
Maximum Continuous Pressure	bar	150
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm





### Material

It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.

### Properties

AFM 33/2 is a gasket material with controlled swelling characteristics in oil. Despite its controlled swelling in oil and thus its particularly good conformability to sealing faces, AFM 33/2 features dimensional stability and good tensile strength. In addition, the material seals off gases well.

### Application

\* to seal hydraulic, motor, transmission and refrigerating oils and other hydrocarbons as well as air, mixtures of water and antifreeze and corrosion inhibitors.

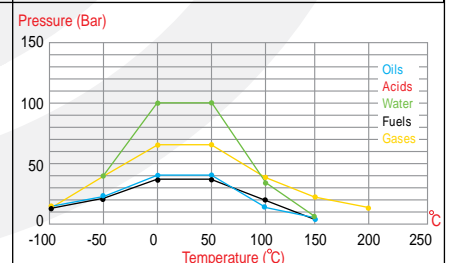
\* For sealing joints with low sealing stress or irregular sealing faces, e.g. for covers, housing, valve covers, oil pans

\* For components which are subject to high mechanical stress yet require a relatively "soft" gasket.

\* For sealing off Freons, alkaline solutions and solvents

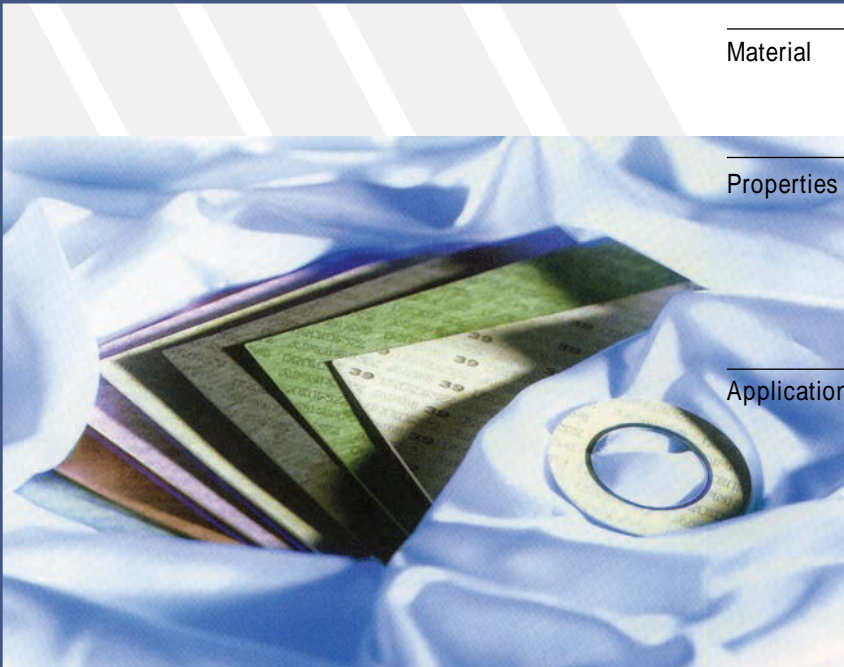
Density	g/cm3	1.55 - 1.75
Ignition Loss DIN 52911	%	< 40
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 14
Tensile Strength DIN 52910 (across grain)	N/mm2	> 10
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	32
Compressibility ASTM F 36 J	%	8 - 15
Recovery ASTM F 36 J	%	> 55
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.1
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	10 - 30
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	10 - 30
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	10 - 30
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	10 - 20
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	200
Maximum Continuous Pressure	bar	120
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm



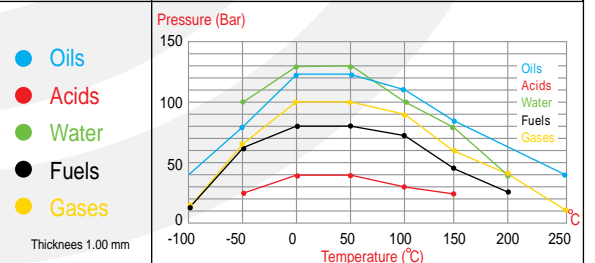


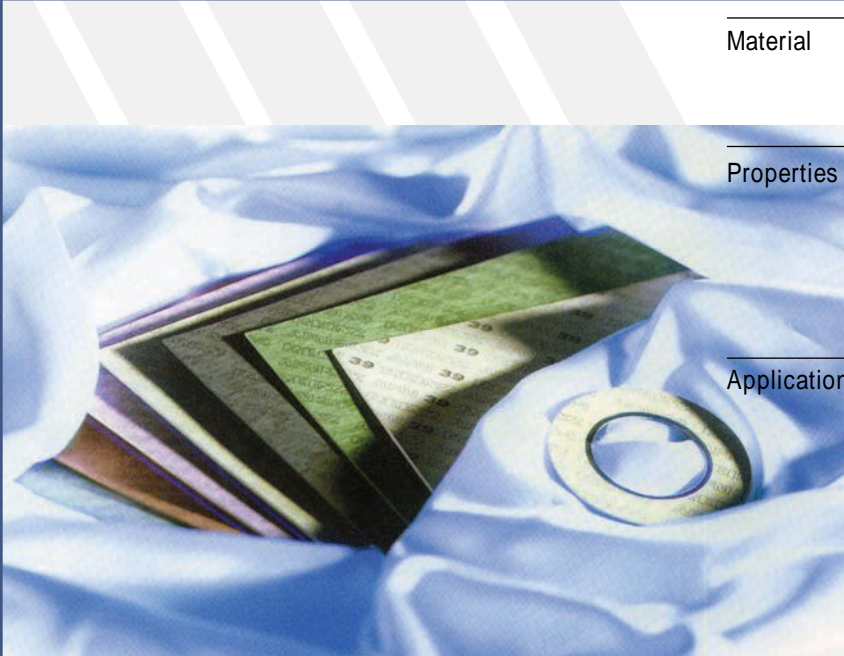
Gasket Materials



<b>Material</b>	It is composed of aramide fibres, inorganic fillers and other asbestos substitutes which are resistant to high temperatures. These are firmly bonded to high-grade elastomers under elevated pressure and temperature to achieve exceptionally high gas sealability.
<b>Properties</b>	AFM 34 does not contain any physiologically harmful substances or colour pigments. AFM 34 exhibits high tensile strength, and shearing resistance. The material is excellently suited to sealing off gases and fluids, e.g. oils, solvents, fuels, freons, liquid gases, water/antifreeze mixtures saline solutions and many other media. Is also suitable for sealing hot water and steam up to approx. 200 °C, with stationary applications, and a mounting surface pressure of at least 50 N/mm. Please consult us if you have a definite application. Other characteristic properties of the material are excellent temperature resistance stress resistance under high operating pressure and ease of handling. In most cases, AFM 34 can be used effortlessly to replace CAF materials within a temperature range of up to 200 °C
<b>Application</b>	* for DIN and ANSI flanged joints, apparatus, pumps, fittings and pipelines in industrial plants e.g. in gas and hot water units, in solar panels, in convection radiators and connections  * for sealing joints in internal combustion engines subject to high mechanical and thermal stress (oil, water, fuel and vacuum pumps etc.)  * for transmission, refrigerating and air compressors  * Since AFM 34 is physiologically safe, it is particularly suitable for use in contact with drinking water and foods and for the sealing of highly pure, pollutant-sensitive products such as paints bases, vitamins, etc

Density	g/cm3	1.8 - 2.0
Ignition Loss DIN 52911	%	< 34
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 18
Tensile Strength DIN 52910 (across grain)	N/mm2	> 12
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	25
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	36
Compressibility ASTM F 36 J	%	5 - 8
Recovery ASTM F 36 J	%	> 55
Sealability against nitrogen DIN 3535/6	mg/(s*m)	0.02
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 7
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 7
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	250
Maximum Continuous Pressure	bar	150
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00-4.00-5.00
Typical values for	mm	2



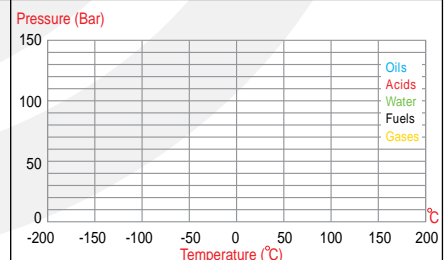


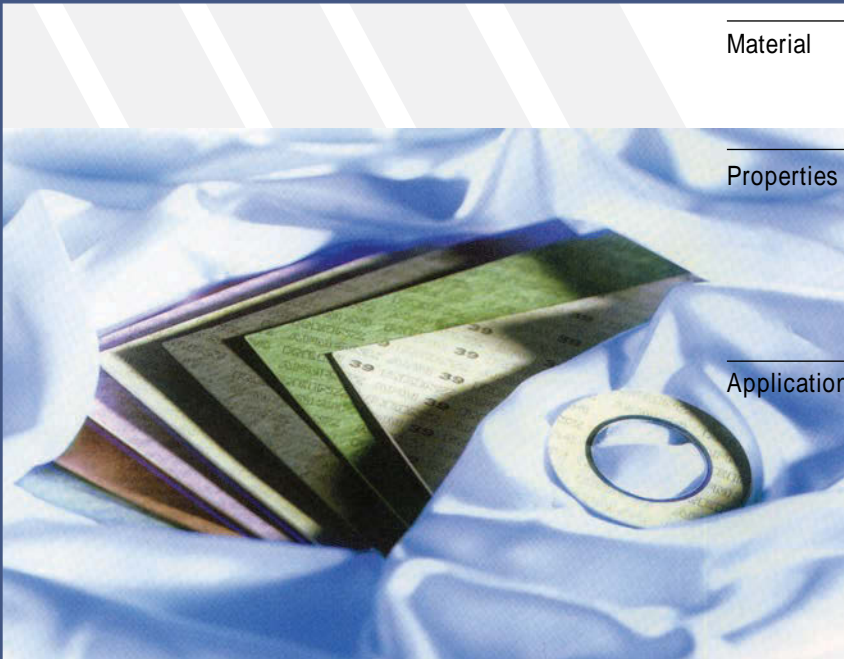
<b>Material</b>	It contains aramid fibres and other temperature resistant asbestos substitutes, processed with elastomers under relevant pressure and relevant temperature.
<b>Properties</b>	It is a cost effective sealing material. It has good mechanical and thermal properties and is also particularly adaptable and extremely suitable for oil and other fluids seals.
<b>Application</b>	In sealing joints that are subject to light to medium loading.

\* against water as well as mixtures of water and antifreeze and corrosion inhibitors

Density	g/cm <sup>3</sup>	1.7 - 1.9
Ignition Loss DIN 52911	%	< 39
Tensile Strength ASTM F 152 (across grain)	N/mm <sup>2</sup>	> 6
Tensile Strength DIN 52910 (across grain)	N/mm <sup>2</sup>	> 4
Residual Stress DIN 52913 (16h / 300 C)	N/mm <sup>2</sup>	
Residual Stress DIN 52913 (16h / 175 C)	N/mm <sup>2</sup>	25
Compressibility ASTM F 36 J	%	8 - 15
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	1
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 15
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 20
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 15
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 15
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 15
Short Term Peak Temperature	°C	300
Maximum Continuous Temperature	°C	200
Maximum Continuous Pressure	bar	80
Sheet Size	mm	1500*1500
Thickness	mm	0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm





**Material**  
It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.

**Properties**  
AFM 37 is an economical gasket material. It exhibits good sealability in contact with gases and fluids coupled with good conformability. The thermal resistance of the material may be regarded as being very good.

**Application**  
\* for sealing joints which are subject to moderate operating pressures, e.g. in transformers, compressors pipelines, apparatus and internal combustion engines.

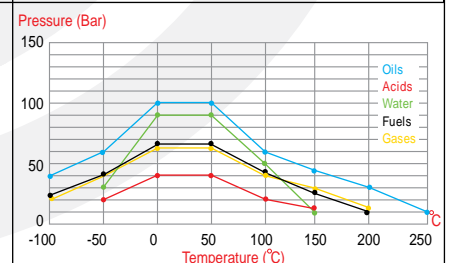
\* For sealing off transmission, hydraulic, refrigerating and motor oils

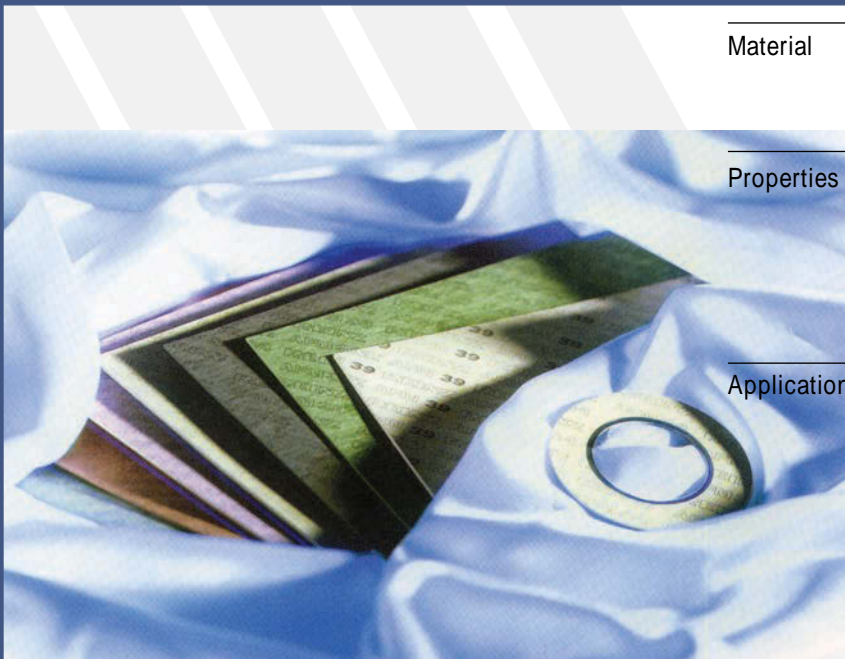
\* For sealing off fuels, mixtures of water and antifreeze and corrosion inhibitors

\* For sealing off Freons, alkaline solutions and solvents

Density	g/cm <sup>3</sup>	1.9 - 2.1
Ignition Loss DIN 52911	%	< 25
Tensile Strength ASTM F 152 (across grain)	N/mm <sup>2</sup>	> 8
Tensile Strength DIN 52910 (across grain)	N/mm <sup>2</sup>	> 6
Residual Stress DIN 52913 (16h / 300 C)	N/mm <sup>2</sup>	22
Residual Stress DIN 52913 (16h / 175 C)	N/mm <sup>2</sup>	32
Compressibility ASTM F 36 J	%	7 - 15
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.1
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 15
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	250
Maximum Continuous Pressure	bar	100
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm

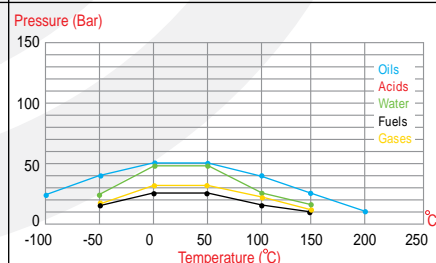




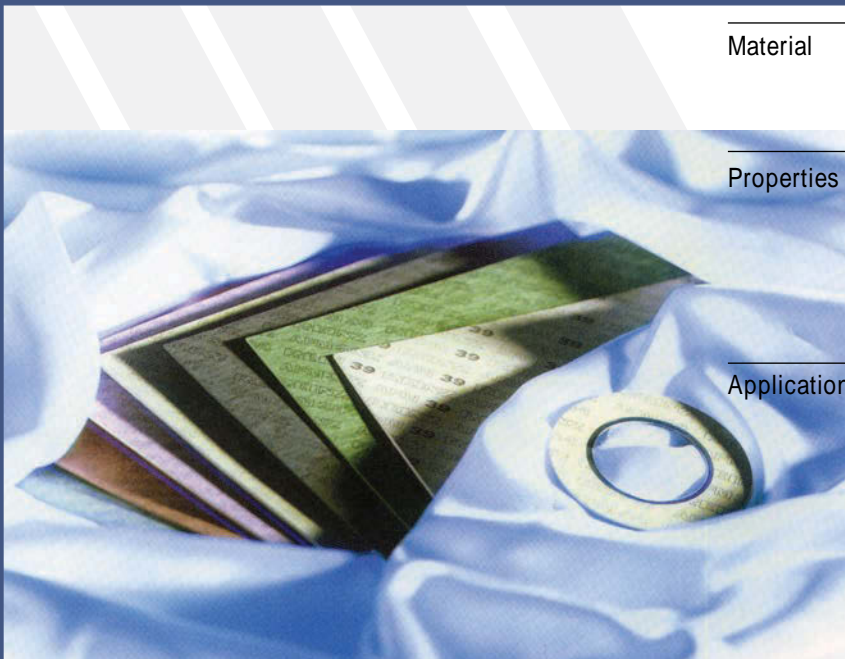
<b>Material</b>	It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.
<b>Properties</b>	AFM 38 is the most economical gasket material in the AFM range. The material which is resistant to oils and solvents is characterized by its very high compressibility and flexibility as well as outstanding gas sealability. AFM 38 ensures very effective sealing even under low surface pressure.
<b>Application</b>	* for sealing joints which are exposed to low mechanical and thermal stress  * For sealing lightweight components with comparatively low surface pressure, e.g. for valve covers, oil pans and covers in internal combustion engines  * For transmissions, pumps, apparatus and pipelines in the fitting and sanitary fields.  * For sealing off motor, transmission, hydraulic and refrigerating oils, fuels and solvents  * against water as well as mixtures of water and antifreeze and corrosion inhibitors

Density	g/cm3	1.5 - 1.7
Ignition Loss DIN 52911	%	< 45
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 7
Tensile Strength DIN 52910 (across grain)	N/mm2	> 5
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	20
Compressibility ASTM F 36 J	%	15 - 25
Recovery ASTM F 36 J	%	> 60
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.01
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 20
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 15
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 15
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 15
Short Term Peak Temperature	°C	300
Maximum Continuous Temperature	°C	200
Maximum Continuous Pressure	bar	50
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm







**Material**  
It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.

**Properties**  
The gasket material is physiologically safe and does not contain any colour pigments. On the one hand, this economical gasket material is conformable and flexible, which ensures adequate sealing even with low surface pressure. On the other hand, it provides adequately high stress resistance coupled with good gas sealability. In addition, AFM 39 is resistant to solvents, oil, fuels, water and many other media.

**Application**  
\* for sealing joints which are subject to moderate thermal and mechanical stress: for fitting in the sanitary area, gas units and heaters

\* for lightweight components and flanges

\* For transmissions, pumps, apparatus and pipelines in the fitting and sanitary fields.

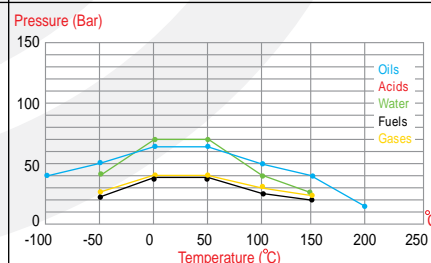
\* for apparatus, transmissions, pumps; for sealing lightweight components with comparatively low surface pressure, e.g. transmissions, valve covers, oil pans and covers in internal combustion engines.

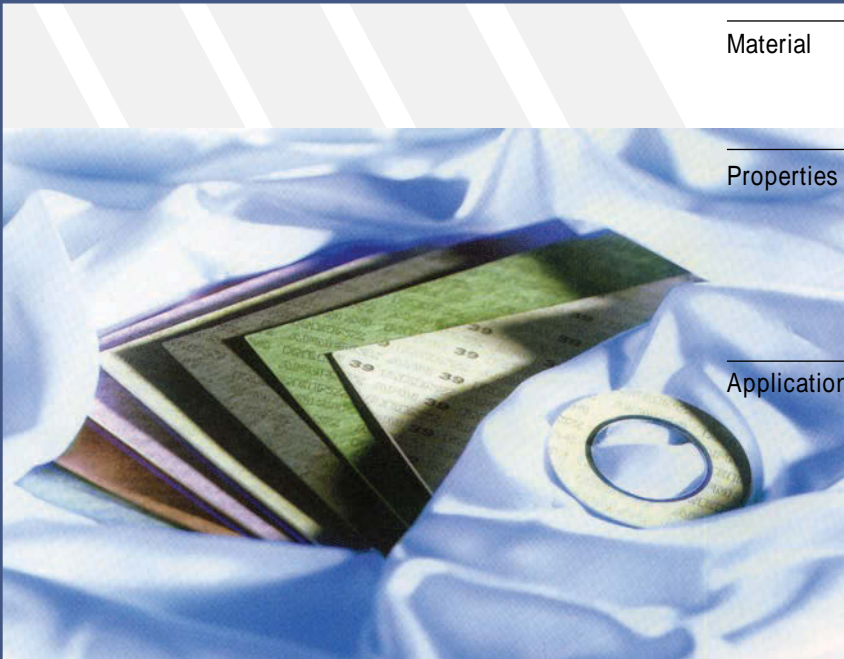
\* against water as well as mixtures of water and antifreeze and corrosion inhibitors

Density	g/cm3	1.8 - 2.0
Ignition Loss DIN 52911	%	< 27
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 7
Tensile Strength DIN 52910 (across grain)	N/mm2	> 5
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	25
Compressibility ASTM F 36 J	%	9 - 18
Recovery ASTM F 36 J	%	> 55
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.05
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 25
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 20
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 25
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 20
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Short Term Peak Temperature	°C	300
Maximum Continuous Temperature	°C	200
Maximum Continuous Pressure	bar	60
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
- Acids
- Water
- Fuels
- Gases

Thickness 1.00 mm

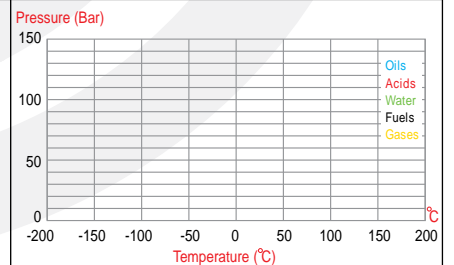


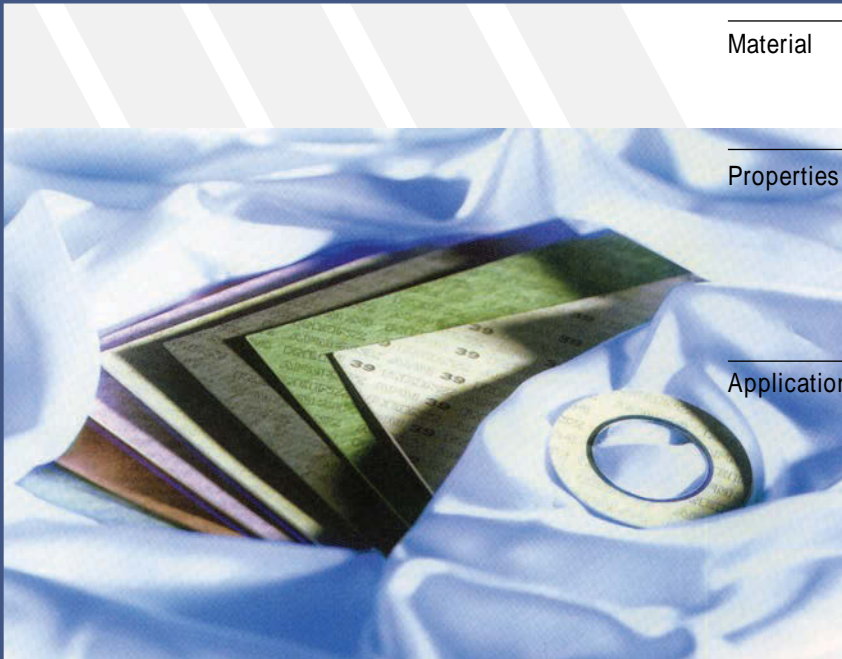


<b>Material</b>	It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with synthetic binders under elevated pressure and temperature.
<b>Properties</b>	AFM 55 is a material which has a good electrical and thermal insulating effect as well as excellent thermal resistance. In the delivery state, AFM 55 is soft, pliable and easy to work and process. Special temperature treatment or normal use at elevated temperature cause the material to become hard and achieve its maximum mechanical strength.
<b>Application</b>	To seal off fluids and for thermal and/or electrical insulation e.g. in hot pressing or welding devices or to manufacture transport rolls resistant to high temperatures

Density	g/cm3	1.8 - 2.0
Ignition Loss DIN 52911	%	< 34
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 10
Tensile Strength DIN 52910 (across grain)	N/mm2	> 8
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	20
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	28
Compressibility ASTM F 36 J	%	4 - 10
Recovery ASTM F 36 J	%	> 50
Sealability against nitrogen DIN 3535/6	mg/(s*m)	
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 10
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 15
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 5
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	< 10
Short Term Peak Temperature	°C	400
Maximum Continuous Temperature	°C	300
Maximum Continuous Pressure	bar	100
Sheet Size	mm	1500*1500
Thickness	mm	0.30-0.50-0.75-1.00-1.50-2.00-3.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm



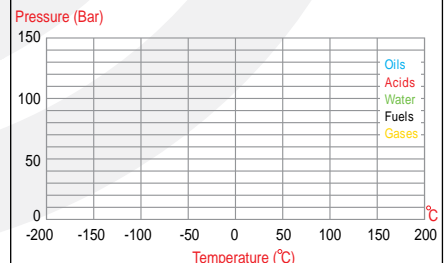


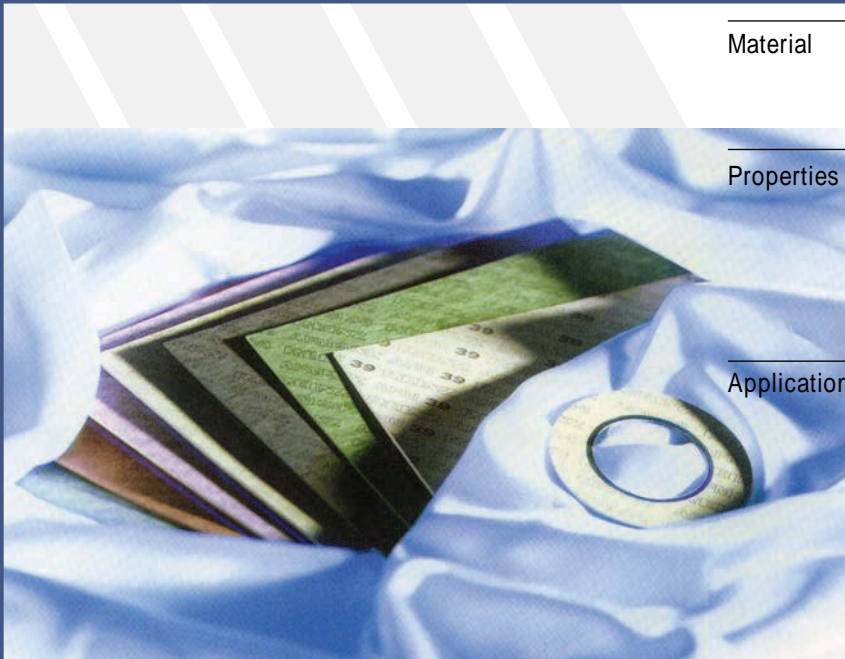
<b>Material</b>	CHEMOTHERM made of expanded graphite and various metal cores. CHEMOTHERM SP pegged core galvanized stell 0.2/0.25 mm CHEOTHERM SPE pegged core 1.44010.1 mm
<b>Properties</b>	CHEMOTHERM is characterized by exceptionally good chemical and thermal resistance, high compressibility, i.e. good conformability to irregular and rough sealing faces, low creep good gas sealability and consistent material characteristics even under alternating operating conditions. The pegged core guarantees an excellent resistance against blow-out at high pressures.
<b>Application</b>	CHEMOTHERM SP is used to seal cylinder heads and exhaust systems of internal combustion engines and wherever high, alternating thermal and mechanical stress is encountered and where the medium to be sealed allows the use of a zinc-galvanized structural steel core. This version is also a very economical alternative to CHEMOTHERM SPE. CHEMOTHERM SPE covers the application range of CHEMOTHERM SPE due to the pegged, stainless steel core used. The material can also be used to seal aggressive media in pipeline and apparatus construction.

		CHEMOTHERM SP	CHEMOTHERM SPE
Density	g/cm <sup>3</sup>	1.0 - 1.1 (graphite layer)	1.0 (graphite layer)
Ignition Loss DIN 52911	%		
Tensile Strength ASTM F 152 (across grain)	N/mm <sup>2</sup>		
Tensile Strength DIN 52910 (across grain)	N/mm <sup>2</sup>		
Residual Stress DIN 52913 (16h / 300 C)	N/mm <sup>2</sup>	> 45	> 48
Residual Stress DIN 52913 (16h / 175 C)	N/mm <sup>2</sup>		
Compressibility ASTM F 36 J	%	15 - 25	30 - 45
Recovery ASTM F 36 J	%	> 20	10 - 20
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.1	< 0.08
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 5	< 5
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	< 20	< 20
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 10	< 10
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	< 20	< 20
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%		
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%		
Short Term Peak Temperature	°C		
Maximum Continuous Temperature	°C	-200 to + 450 C	-200 to + 450 C
Maximum Continuous Pressure	bar	100 at 450 C	100 at 450 C
Sheet Size	mm	500 mm roll	500 mm roll
Thickness	mm	1.00-1.50-2.00	1.00-1.50-2.00
Typical values for	mm	2	2

- Oils
- Acids
- Water
- Fuels
- Gases

Thickness 1.00 mm





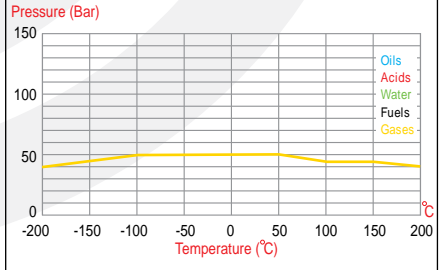
**Material** REINZOFLON 100 is a graphite-filled, cold-flow reduced PTFE (polytetrafluoroethylene) which can be used up to 200

**Properties** REINZOFLON 100 like all PTFE materials, has excellent chemical resistance. In addition, REINZOFLON 100 is soft and therefore conforms very well to irregular or rough sealing faces, thus ensuring outstanding pressure distribution. Nevertheless, REINZOFLON 100 shows only low creep and thus has unusually high stress resistance for a PTFE material. This in turn results in long-term efficient sealing.

**Application** REINZOFLON 100 is used in the form of flat gaskets for pipelines, fitting, pumps, containers, mixers, heat exchangers, etc. wherever the fluids to be sealed are so aggressive that a PTFE gasket is required. This is particularly the case in the chemical and pharmaceutical industry but also in cellulose or aluminium processing where strong acids and alkaline solutions are used.

Density	g/cm3	1.0 - 1.2
Ignition Loss DIN 52911	%	Hardness (DIN 53 505) 82 - 88
Tensile Strength ASTM F 152 (across grain)	N/mm2	> 4 (DIN 53 455)
Tensile Strength DIN 52910 (across grain)	N/mm2	
Residual Stress DIN 52913 (16h / 300 C)	N/mm2	
Residual Stress DIN 52913 (16h / 175 C)	N/mm2	
Compressibility ASTM F 36 J	%	50 - 60
Recovery ASTM F 36 J	%	22 - 30
Sealability against nitrogen DIN 3535/6	mg/(s*m)	< 0.002
Thickness Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	
Weight Increase ASTM F 146 (oil IRM 903: 5 h/150 C)	%	
Thickness Increase ASTM F 146 (fuel B: 5 h/23 C)	%	
Weight Increase ASTM F 146 (fuel B: 5 h/23 C)	%	
Thickness Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	
Weight Increase ASTM F 146 (water / antifreeze 50:50 5h/100 C)	%	
Short Term Peak Temperature	°C	
Maximum Continuous Temperature	°C	200
Maximum Continuous Pressure	bar	50
Sheet Size	mm	1500*1500
Thickness	mm	2.00-3.00-4.00-5.00-6.00
Typical values for	mm	2

- Oils
  - Acids
  - Water
  - Fuels
  - Gases
- Thickness 1.00 mm



	AFM 34, AFM 34 METALL, IGV	AFM 30	AFM 37	AFM 38	AFM 39	AFM 33/2	CHEMOTERM SPE	REINZOFLON 100
Acetaldehyde	●	●	●	●	●	●	●	●
Acetic add	●	●	●	○	○	○	●	●
Acetic add anhydride	●	●	●	●	○	○	●	●
Acetone	●	●	●	○	●	●	●	●
Acetylene	●	●	●	●	●	●	●	●
Aluminium salts2	●	●	○	●	●	●	●	●
Alums	●	●	●	●	●	●	●	●
Ammonium salts2	●	●	●	●	●	●	●	●
Aniline	●	●	●	○	○	▲	●	●
Asphalt	●	●	●	●	●	●	●	●
Benzaldehyde	●	●	●	○	●	●	●	●
Benzene	●	●	●	●	●	▲	●	●
Bleaching alkaline, dilute	●	●	●	●	●	●	○	●
Borax	●	●	●	●	●	●	●	●
Boric add	●	●	●	●	●	●	●	●
Butane	●	●	●	●	●	●	●	●
Butanol	●	●	●	●	●	●	●	●
Butylacetate	●	●	●	●	●	●	●	●
Butyric add	●	●	●	●	●	●	●	●
Calcium hydroxide	●	●	●	●	●	●	●	●
Calcium salts	●	●	●	●	●	●	●	●
Carbon disulphide	●	●	●	○	○	○	●	●
Carbon tetrachloride	●	●	●	●	●	●	●	●
Chlorine water	●	●	●	●	●	●	●	●
Chloroacetic add	●	●	●	▲	▲	▲	●	●
Chlorobenzene	●	●	●	○	○	▲	●	●
Chlorodiphenyl	●	●	●	●	○	○	●	●
Chloroform	●	●	●	●	●	●	●	●
Chromic acid	▲	▲	▲	▲	▲	▲	●	●
Chromium salts	●	●	●	●	●	●	●	●
Citric acid	●	●	●	●	●	●	●	●
Cresol	●	○	●	▲	▲	○	●	●
Cyclohexane	●	●	●	●	●	●	●	●

	AFM 34, AFM 34 METALL, IGV	AFM 30	AFM 37	AFM 38	AFM 39	AFM 33/2	CHEMOTERM SPE	REINZOFLON 100
Cyclohexanol	●	●	●	●	●	●	●	●
Cyclohexanone	●	●	●	●	●	○	●	●
Dibutyl phthalate	●	●	●	●	●	●	●	●
Diesel oil	●	●	●	●	●	●	●	●
Diethyl amine	●	●	●	▲	○	●	●	●
Diethyl ether	●	●	●	●	●	●	●	●
Diethyl glycol	●	●	●	●	●	●	●	●
Dimethylether	●	●	●	●	●	●	●	●
Dimethyl formamide	●	●	●	▲	○	▲	●	●
Dioxane	●	●	●	●	●	●	●	●
Diphenyl methane	●	●	●	●	●	●	●	●
Ethane	●	●	●	●	●	●	●	●
Ethanol	●	●	●	●	●	●	●	●
Ethanolamine	●	●	●	●	●	●	●	●
Ether	●	●	●	●	○	●	●	●
Ethyl benzene	●	●	●	●	○	●	●	●
Ethylene	●	●	●	●	●	●	●	●
Ethylene glycol	●	●	●	●	●	●	●	●
Fatty acids from C 10	●	●	●	●	●	●	●	●
Fluoric add	▲	▲	▲	▲	▲	▲	●	●
Formaldehyde	●	●	●	●	●	●	●	●
Formic add	●	●	●	▲	▲	○	●	●
Freons CFC's	●	●	●	●	●	●	●	●
Gelatine	●	●	●	●	●	●	●	●
Glycols	●	●	●	●	●	●	●	●
Heating oil	●	●	●	●	●	●	●	●
Heat conducting oils, synth	●	●	●	●	●	▲	●	●
Hexane	●	●	●	●	●	●	●	●
Hydraulic - (Mineral oil based) fluids (Ester based)	●	●	●	●	○	●	●	●

	AFM 34, AFM 34 METALL, IGV	AFM 30	AFM 37	AFM 38	AFM 39	AFM 33/2	CHEMOTERM SPE	REINZOFLON 100
Hydrochloric add, cons.	○	●	●	▲	▲	●	○	●
Hydrochloric add, dilute	○	●	●	●	○	●	○	●
Hydrogen	●	●	●	●	●	●	●	●
Hydrogen peroxide, dilute	●	●	●	●	●	●	●	●
Hydrogen sulphide	●	●	●	●	●	●	●	●
Isopropyl alcohol	●	●	●	●	●	●	●	●
Iron salts	●	●	●	●	●	●	●	●
Kerosene (Petroleum)	●	●	●	●	●	○	●	●
Lead salts	●	●	●	●	●	●	●	●
Lubricating oils	●	●	●	●	●	●	●	●
Machine oils RT	●	●	●	●	●	●	●	●
Machine oils 100 C	●	●	●	●	●	●	●	●
Magnesium hydroxide	●	●	●	●	●	●	●	●
Methane	●	●	●	●	●	●	●	●
Methyl alcohol	●	●	●	●	●	●	●	●
Methyl chloride	●	○	○	○	●	○	●	●
Methylene chloride	●	●	●	●	●	●	●	●
Methylethylketone (Butanone)	●	●	●	●	●	●	●	●
Motor oils RT	●	●	●	●	●	●	●	●
Motor oils 100 C	●	●	●	●	●	●	●	●
Naphtha	●	●	●	●	●	○	●	●
Natural gas	●	●	●	●	●	●	●	●
Nickel salts	●	●	●	●	●	●	●	●
Nitric add, conc.	▲	▲	▲	▲	▲	▲	○	●
Nitric add, dilute	●	●	●	●	○	●	●	●
Nitrobenzenes	●	●	●	▲	○	▲	●	●
Oxalic acid	●	●	●	●	●	●	●	●
Oxygen	●	●	▲	▲	▲	▲	●	●

	AFM 34, AFM 34 METALL, IGV	AFM 30	AFM 37	AFM 38	AFM 39	AFM 33/2	CHEMOTERM SPE	REINZOFLON 100
Perchloroethylene	●	●	●	●	●	●	●	●
Petrol	●	●	●	●	○	●	●	●
Petroleum ether	●	●	●	●	○	●	●	●
Petroleum oil	●	●	●	●	●	●	●	●
Pheno	●	●	●	▲	▲	○	●	●
Phenylether	●	●	●	●	●	●	●	●
Phenylhydrazine	●	●	●	○	○	●	●	●
Phosphoric add	●	●	●	●	●	●	●	●
Phthalic add anhydride	●	●	●	●	●	●	●	●
Potassium hydroxide	●	●	●	▲	▲	●	●	●
Potassium salts	●	●	●	●	●	●	●	●
Pyridine	●	●	●	▲	○	▲	●	●
Salicylic add	●	●	●	●	●	●	●	●
Sea water	●	●	●	●	●	●	●	●
Steam 130 C	●	●	●	○	○	●	●	●
Styrene	●	●	●	●	●	▲	●	●
Sulphuric add, conc.	▲	▲	▲	▲	▲	▲	○	●
Sulphuric add, dilute	●	●	●	○	○	●	●	●
Sulphurous add	●	●	●	●	●	●	●	●
Sodium Hydroxide (Caustic soda sol.)	●	●	●	▲	▲	●	●	●
Terpentine	●	●	●	●	●	●	●	●
Toluene	●	●	●	●	●	▲	●	●
Transformer oils	●	●	●	●	●	●	●	●
Transmission oil	●	●	●	●	●	●	●	●
Trichloroethylene	●	●	●	●	●	●	●	●
Triethanolamine	●	●	●	●	●	●	●	●
Vegetable oils	●	●	●	●	●	●	●	●
Water	●	●	●	●	●	●	●	●
Zinc salts	●	●	●	●	●	●	●	●

- resistant
- partly resistant: testing under operational conditions recommended
- ▲ not resistant