



TESNIT® BA-55 is a standard gasket material made of special synthetic fibers, which makes it very suitable for use with higher thermal loads.

## PROPERTIES

Composition	Special synthetic fibers bonded with NBR. Available with wire reinforcement on request.
Colour	Dark green
Properties	Excellent thermal properties and very good steam resistance.
Appropriate industries	Potable water supply, gas supply, pumps, radiators, steam supply.
Approvals	BAM (Oxygen), DIN-DVGW DIN 3535-6, DVGW KTW, DVGW W270, DVGW VP 401, DVGW VP 401 (5 bar), EC 1935/2004

## SURFACE TREATMENTS

Surface treatment is 4AS.  
Other surface treatments including graphite and PTFE are available on request.

## DIMENSIONS OF STANDARD SHEETS

Sheet size (mm): 1500 x 1500 | 3000 x 1500 | 4500 x 1500  
Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0 | 3.0  
Other dimensions and thicknesses are available on request.

### Tolerances:

+/- 5 % on length and width  
On thickness up to 1.0 mm +/- 0.1 mm  
On thickness above 1.0 mm +/- 10 %

## TECHNICAL DATA

<b>Density</b>	DIN 28090-2	g/cm <sup>3</sup>	1.8
<b>Compressibility</b>	ASTM F36J	%	7
<b>Recovery</b>	ASTM F36J	%	55
<b>Tensile strength</b>	ASTM F152	MPa	7
<b>Stress resistance</b>	DIN 52913		
16 h, 50 MPa, 175 °C		MPa	35
16 h, 50 MPa, 300 °C		MPa	30
<b>Specific leak rate</b>	DIN 3535-6	mg/(s·m)	0.08
<b>Thickness increase</b>	ASTM F146		
Oil IRM 903, 5 h, 150 °C		%	8
ASTM Fuel B, 5 h, 23 °C		%	10
<b>Compression modulus</b>	DIN 28090-2		
At room temperature: $\epsilon_{KSW}$		%	7.6
At elevated temperature: $\epsilon_{WSW/200\text{ °C}}$		%	11.4
<b>Percentage creep relaxation</b>	DIN 28090-2		
At room temperature: $\epsilon_{KRW}$		%	3.2
At elevated temperature: $\epsilon_{WRW/200\text{ °C}}$		%	0.8
<b>Max. operating conditions</b>			
Peak temperature		°C/°F	350/662
Continuous temperature		°C/°F	270/518
- with steam		°C/°F	230/446
Pressure		bar/psi	100/1450

## CHEMICAL RESISTANCE CHART

The recommendations made here are intended to be a guideline for the selection of the suitable gasket quality. Because the function and durability of the products depend upon a number of factors, the data may not be used to support any warranty claims.

- + Recommended
- ? Recommendation depends on operating conditions
- Not recommended

	BA-55		BA-55		BA-55
Acetamide	+	Ethyl acetate	?	Oleum	-
Acetic acid 10%	+	Ethyl alcohol	+	Oxalic acid	?
Acetic acid 100%	+	Ethyl chloride	?	Oxygen	+
Acetic ester	-	Ethylene	+	Palmitic acid	+
Acetone	?	Ethylene glycol	+	Pentane	+
Acetylene	+	Formic acid 10%	+	Perchloroethylene	?
Adipic acid	+	Formic acid 85%	?	Phenol	-
Air	+	Formaldehyde	+	Phosphoric acid	-
Alum	+	Freon 12	+	Potassium acetate	+
Aluminium acetate	+	Freon 22	?	Potassium bicarbonate	+
Aluminium chlorate	+	Fuel oil	+	Potassium carbonate	+
Aluminium chloride	+	Gasoline	+	Potassium chloride	+
Ammonia	?	Glycerine	+	Potassium dichromate	+
Ammonium bicarbonate	+	Heptane	+	Potassium hydroxide	?
Ammonium chloride	+	Hydraulic oil (Mineral)	+	Potassium iodide	+
Ammonium hydroxide	+	Hydraulic oil (Phosphate ester type)	?	Potassium nitrate	+
Amyl acetate	-	Hydraulic oil (Glycol based)	+	Potassium permanganate	+
Aniline	-	Hydrazine	+	Propane	+
Asphalt	+	Hydrochloric acid 20%	-	Pyridine	-
Barium chloride	+	Hydrochloric acid 36%	-	R 134a	+
Benzene	?	Hydrofluoric acid 10%	-	Salicylic acid	+
Benzoic acid	+	Hydrofluoric acid 40%	-	Silicone oil	+
Boric acid	+	Hydrogen	+	Soap	+
Borax	+	Isobutane	+	Sodium aluminate	+
Butane	+	Isooctane	+	Sodium bicarbonate	+
Butyl alcohol	+	Isopropyl alcohol	+	Sodium bisulphite	+
Butyric acid	+	Kerosene	+	Sodium carbonate	+
Calcium chloride	+	Lead acetate	+	Sodium chloride	+
Calcium hydroxide	+	Lead arsenate	+	Sodium cyanide	+
Carbon dioxide	+	Magnesium sulphate	+	Sodium hydroxide	?
Carbon disulphide	-	Malic acid	+	Sodium sulphate	+
Chloroform	?	Methane	+	Sodium sulphide	+
Chlorine, dry	-	Methanol	+	Starch	+
Chlorine, wet	-	Methyl chloride	?	Steam	+
Chromic acid	-	Methylene dichloride	-	Stearic acid	+
Citric acid	+	Methyl ethyl ketone	-	Sugar	+
Copper acetate	+	Milk	+	Sulphuric acid 20%	-
Creosote	-	Mineral oil type ASTM no.1	+	Sulphuric acid 96%	-
Cresol	?	Naphtha	+	Tar	+
Cyclohexanol	+	Nitric acid 20%	-	Tartaric acid	+
Cyclohexanone	?	Nitric acid 40%	-	Toluene	+
Decalin	+	Nitric acid 96%	-	Transformer oil	+
Dibenzyl ether	-	Nitrobenzene	-	Trichlorethylene	?
Dimethyl formamide	-	Nitrogen	+	Water	+
Dowtherm	?	Octane	+	White spirit	+
Ethane	+	Oleic acid	+	Xylene	?

All information and data quoted are based upon years of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.