



TESNIT® BA-R300

TESNIT® BA-R300 has outstanding dynamic and thermal resistance. It is designed for use in high temperature applications, particularly shipbuilding.



PROPERTIES

	MECHANICAL RESISTANCE	THERMAL RESISTANCE	
SUPERIOR			
EXCELLENT			
VERY GOOD			
GOOD		SEALABILITY PERFORMANCE	CHEMICAL RESISTANCE
MODERATE			

APPROPRIATE INDUSTRIES & APPLICATIONS

- STEAM SUPPLY
- AUTOMOTIVE AND ENGINE BUILDING INDUSTRY
- SHIPBUILDING
- POWER PLANT
- HIGH TEMP. APPLICATIONS

Composition	Biosoluble material fibres, inorganic fillers
	NBR binder, carbon steel wire mesh reinforcement
Color	Black
Approvals	DNV GL

TECHNICAL DATA

 Typical values for a thickness of 2 mm

Density	DIN 28090-2	g/cm ³	3.2
Compressibility	ASTM F36J	%	10
Recovery	ASTM F36J	%	40
Tensile strength	ASTM F152	MPa	/
Stress resistance	DIN 52913		
50 MPa, 175 °C, 16 h		MPa	46
50 MPa, 300 °C, 16 h		MPa	40
Specific leak rate	DIN 3535-6	mg/(s·m)	/
Thickness increase	ASTM F146		
Oil IIRM 903, 150 °C, 5 h		%	5
ASTM Fuel B, 23 °C, 5 h		%	/
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	11.1
At elevated temperature: $\epsilon_{WSW/200\text{ °C}}$		%	6.9
Creep relaxation	DIN 28090-2		
At room temperature: ϵ_{KRW}		%	3.4
At elevated temperature: $\epsilon_{WRW/200\text{ °C}}$		%	0.4
Max. operating conditions			
Peak temperature		°C/°F	550/1022
Continuous temperature		°C/°F	450/842
- with steam		°C/°F	/
Pressure		bar/psi	/

Surface finish	Standard: 2G. Optional: graphite or PTFE
Sheet dimensions	Size [mm]: 1500 x 1400 Rolls Thickness [mm]: 0.7 1.0 1.2 1.4 2.0 2.5 3.0 Other sizes and thicknesses available on request
Tolerances	On length and width: ± 5 % On thickness up to 1.0 mm: ± 0.1 mm On thickness above 1.0 mm: ± 10 %

Acetamide	+	Dioxane	-	Oleic acid	-
Acetic acid, 10%	-	Diphyl [Dowtherm A]	+	Oleum [Sulfuric acid, fuming]	-
Acetic acid, 100% (Glacial)	-	Esters	○	Oxalic acid	-
Acetone	○	Ethane [gas]	+	Oxygen [gas]	-
Acetonitrile	-	Ethers	○	Palmitic acid	-
Acetylene [gas]	+	Ethyl acetate	○	Paraffin oil	+
Acid chlorides	-	Ethyl alcohol [Ethanol]	+	Pentane	+
Acrylic acid	-	Ethyl cellulose	○	Perchloroethylene	-
Acrylonitrile	-	Ethyl chloride [gas]	-	Petroleum [Crude oil]	+
Adipic acid	-	Ethylene [gas]	+	Phenol [Carbolic acid]	-
Air [gas]	+	Ethylene glycol	+	Phosphoric acid, 40%	-
Aldehydes	○	Formaldehyde [Formalin]	○	Phosphoric acid, 85%	-
Alum	○	Formamide	○	Phthalic acid	-
Aluminium acetate	-	Formic acid, 10%	-	Potassium acetate	-
Aluminium chloride	-	Formic acid, 85%	-	Potassium bicarbonate	+
Aluminium chloride	-	Formic acid, 100%	-	Potassium carbonate	+
Aluminium sulfate	-	Freon-12 [R-12]	+	Potassium chloride	-
Amines	-	Freon-134a [R-134a]	+	Potassium cyanide	-
Ammonia [gas]	○	Freon-22 [R-22]	○	Potassium dichromate	-
Ammonium bicarbonate	+	Fruit juices	+	Potassium hydroxide	○
Ammonium chloride	-	Fuel oil	+	Potassium iodide	-
Ammonium hydroxide	+	Gasoline	+	Potassium nitrate	-
Amyl acetate	○	Gelatin	+	Potassium permanganate	-
Anhydrides	-	Glycerine [Glycerol]	+	Propane [gas]	+
Aniline	-	Glycols	+	Propylene [gas]	+
Anisole	○	Helium [gas]	+	Pyridine	-
Argon [gas]	+	Heptane	+	Salicylic acid	-
Asphalt	+	Hydraulic oil [Glycol based]	+	Seawater/brine	-
Barium chloride	-	Hydraulic oil [Mineral type]	+	Silicones [oil/grease]	+
Benzaldehyde	-	Hydraulic oil [Phosphate ester based]	○	Soaps	+
Benzene	+	Hydrazine	-	Sodium aluminate	+
Benzoic acid	○	Hydrochloric acid, 10%	-	Sodium bicarbonate	+
Bio-diesel	+	Hydrochloric acid, 37%	-	Sodium bisulfite	-
Bio-ethanol	+	Hydrofluoric acid, 10%	-	Sodium carbonate	+
Black liquor	-	Hydrofluoric acid, 48%	-	Sodium chloride	-
Borax	+	Hydrogen [gas]	+	Sodium cyanide	-
Boric acid	-	Iron sulfate	-	Sodium hydroxide	○
Butadiene [gas]	+	Isobutane [gas]	+	Sodium hypochlorite [Bleach]	-
Butane [gas]	+	Isooctane	+	Sodium silicate [Water glass]	○
Butyl alcohol [Butanol]	+	Isoprene	+	Sodium sulfate	+
Butyric acid	-	Isopropyl alcohol [Isopropanol]	+	Sodium sulfide	-
Calcium chloride	-	Kerosene	+	Starch	+
Calcium hydroxide	+	Ketones	○	Steam	○
Carbon dioxide [gas]	+	Lactic acid	-	Stearic acid	-
Carbon monoxide [gas]	+	Lead acetate	-	Styrene	○
Cellosolve	○	Lead arsenate	-	Sugars	+
Chlorine [gas]	-	Magnesium sulfate	+	Sulfur	○
Chlorine [in water]	-	Maleic acid	-	Sulfur dioxide [gas]	○
Chlorobenzene	○	Malic acid	-	Sulfuric acid, 20%	-
Chloroform	-	Methane [gas]	+	Sulfuric acid, 98%	-
Chloroprene	○	Methyl alcohol [Methanol]	+	Sulfuryl chloride	-
Chlorosilanes	-	Methyl chloride [gas]	○	Tar	+
Chromic acid	-	Methylene dichloride	○	Tartaric acid	-
Citric acid	-	Methyl ethyl ketone [MEK]	○	Tetrahydrofuran [THF]	-
Copper acetate	-	N-Methyl-pyrrolidone [NMP]	○	Titanium tetrachloride	-
Copper sulfate	-	Milk	+	Toluene	+
Creosote	○	Mineral oil [ASTM no.1]	+	2,4-Toluenediisocyanate	○
Cresols [Cresylic acid]	-	Motor oil	+	Transformer oil [Mineral type]	+
Cyclohexane	+	Naphtha	+	Trichloroethylene	-
Cyclohexanol	+	Nitric acid, 10%	-	Vinegar	-
Cyclohexanone	○	Nitric acid, 65%	-	Vinyl chloride [gas]	-
Decalin	+	Nitrogen [gas]	+	Vinylidene chloride	-
Dextrin	+	Nitrous gases [NOx]	-	Water	○
Dibenzyl ether	○	Octane	+	White spirits	+
Dibutyl phthalate	○	Oils [Essential]	+	Xylenes	+
Dimethylacetamide [DMA]	○	Oils [Vegetable]	+	Xylenol	-
Dimethylformamide [DMF]	○	Zinc sulfate	-	Zinc sulfate	-

All information and data quoted are based upon decades 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.

CHEMICAL RESISTANCE CHART

The recommendations made here are intended as a guideline for the selection of a suitable gasket type. As the function and durability of products are dependent upon a number of factors, the data may not be used to support any warranty claims. If there are specific type-approval regulations, these have to be complied with.

- ⊕ Recommended
- Recommendation depends on operating conditions
- Not recommended



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