



TESNIT® BA-R300 has outstanding dynamic and thermal resistance. TASNIT® BA-R300 is designed for use in high temperature applications, like those within ships' engines.

PROPERTIES

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

APPROPRIATE INDUSTRIES & APPLICATIONS

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

Composition	Engineered bio-soluble mineral fibers, inorganic fillers, NBR binder, tough carbon steel wire mesh insert.
Color	Black
Approvals	Germanischer Lloyd

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		
16 h, 50 MPa, 175 °C		MPa	46
16 h, 50 MPa, 300 °C		MPa	40
Specific leak rate	DIN 3535-6	mg/(s·m)	/
Thickness increase	ASTM F146		
Oil IRM 903, 5 h, 150 °C		%	5
ASTM Fuel B, 5 h, 23 °C		%	/
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	11.1
At elevated temperature: $\epsilon_{WSW/200\text{ °C}}$		%	6.9
Percentage 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 on request.
Standard dimension of sheets	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%	-	Diphyt (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%	-
Alcohols	+	Formaldehyde (Formalin)	?	Phosphoric acid, 85%	-
Aldehydes	?	Formamide	?	Phthalic acid	-
Alum	?	Formic acid, 10%	-	Potassium acetate	-
Aluminium acetate	-	Formic acid, 85%	-	Potassium bicarbonate	+
Aluminium chloride	-	Formic acid, 100%	-	Potassium carbonate	+
Aluminium chloride	-	Freon-12 (R-12)	+	Potassium chloride	-
Aluminium sulfate	-	Freon-134a (R-134a)	+	Potassium cyanide	-
Amines	-	Freon-22 (R-22)	?	Potassium dichromate	-
Ammonia (gas)	?	Fruit juices	-	Potassium hydroxide	?
Ammonium bicarbonate	+	Fuel oil	+	Potassium iodide	-
Ammonium chloride	-	Gasoline	+	Potassium nitrate	-
Ammonium hydroxide	+	Gelatin	+	Potassium permanganate	-
Amyl acetate	?	Glycerine (Glycerol)	+	Propane (gas)	+
Anhydrides	-	Glycols	+	Propylene (gas)	+
Aniline	-	Helium (gas)	+	Pyridine	-
Anisole	?	Heptane	+	Salicylic acid	-
Argon (gas)	+	Hydraulic oil (Glycol based)	+	Seawater/brine	-
Asphalt	+	Hydraulic oil (Mineral type)	+	Silicones (oil/grease)	+
Barium chloride	-	Hydraulic oil (Phosphate ester based)	?	Soaps	+
Benzaldehyde	-	Hydrazine	-	Sodium aluminate	+
Benzene	+	Hydrocarbons	+	Sodium bicarbonate	+
Benzoic acid	?	Hydrochloric acid, 10%	-	Sodium bisulfite	-
Bio-diesel	+	Hydrochloric acid, 37%	-	Sodium carbonate	+
Bio-ethanol	+	Hydrofluoric acid, 10%	-	Sodium chloride	-
Black liquor	-	Hydrofluoric acid, 48%	-	Sodium cyanide	-
Borax	+	Hydrogen (gas)	+	Sodium hydroxide	?
Boric acid	-	Iron sulfate	-	Sodium hypochlorite (Bleach)	-
Butadiene (gas)	+	Isobutane (gas)	+	Sodium silicate (Water glass)	?
Butane (gas)	+	Isooctane	+	Sodium sulfate	+
Butyl alcohol (Butanol)	+	Isoprene	+	Sodium sulfide	-
Butyric acid	-	Isopropyl alcohol (Isopropanol)	+	Starch	+
Calcium chloride	-	Kerosene	-	Steam	?
Calcium hydroxide	+	Ketones	?	Stearic acid	-
Carbon dioxide (gas)	+	Lactic acid	-	Styrene	?
Carbon monoxide (gas)	+	Lead acetate	-	Sugars	+
Cellosolve	?	Lead arsenate	-	Sulfur	?
Chlorine (gas)	-	Magnesium sulfate	+	Sulfur dioxide (gas)	?
Chlorine (in water)	-	Maleic acid	-	Sulfuric acid, 20%	-
Chlorobenzene	?	Malic acid	-	Sulfuric acid, 98%	-
Chloroform	-	Methane (gas)	+	Sulfuryl chloride	-
Chloroprene	?	Methyl alcohol (Methanol)	+	Tar	+
Chlorosilanes	-	Methyl chloride (gas)	?	Tartaric acid	-
Chromic acid	-	Methylene dichloride	?	Tetrahydrofuran (THF)	-
Citric acid	-	Methyl ethyl ketone (MEK)	?	Titanium tetrachloride	-
Copper acetate	-	N-Methyl-pyrrolidone (NMP)	?	Toluene	+
Copper sulfate	-	Milk	+	2,4-Toluenediisocyanate	?
Creosote	?	Mineral oil (ASTM no. 1)	+	Transformer oil (Mineral type)	+
Cresols (Cresylic acid)	-	Motor oil	+	Trichloroethylene	-
Cyclohexane	+	Naphtha	+	Vinegar	-
Cyclohexanol	+	Nitric acid, 10%	-	Vinyl chloride (gas)	-
Cyclohexanone	?	Nitric acid, 65%	-	Vinylidene chloride	-
Decalin	+	Nitrobenzene	-	Water	?
Dextrin	+	Nitrogen (gas)	+	White spirits	+
Dibenzyl ether	?	Nitrous gases (NOx)	-	Xylenes	+
Di-butyl phthalate	?	Octane	+	Xylenol	-
Dimethylacetamide (DMA)	?	Oils (Essential)	+	Zinc sulfate	-
Dimethylformamide (DMF)	?	Oils (Vegetable)	+		

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.

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



DONIT TESNIT, d.o.o.

Cesta komandanta Staneta 38
1215 Medvode, Slovenia

Phone: +386 (0)1 582 33 00

Fax: +386 (0)1 582 32 06
+386 (0)1 582 32 08

Web: www.donit.eu

E-mail: info@donit.eu

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