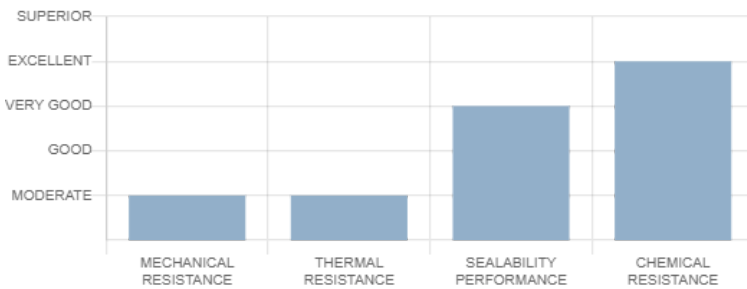


TESNIT® BA-C



TESNIT® BA-C gasket material with a vulcanized CSM matrix combines very good chemical and aging resistance, and low gas permeability. It can be used for sealing strongly acidic and alkaline solutions and gases, ozonized or chlorinated water, and the like.

PROPERTIES



APPROPRIATE INDUSTRIES & APPLICATIONS

- CHEMICAL INDUSTRY
- GENERAL PURPOSE
- PAPER & CELLULOSE INDUSTRIES

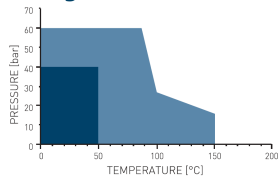
Composition	Aramid fibers, inorganic fillers, CSM binder
Color	Beige
Approvals and compliances	Please inquiry
Sheet dimensions	Sheet size (mm): 1500 x 1500 Thickness (mm): 0.5 0.8 1.0 1.5 2.0 3.0 Other dimensions and thicknesses are available on request.
Tolerances	Length and width: ± 5 % Thickness ≤ 1.0 mm: ± 0.1 mm Thickness > 1.0 mm: ± 10 %
Surface finish	Surface finish is 4AS. Optional graphite or PTFE finish on request

TECHNICAL DATA

Typical values for 2 mm thickness

Density	DIN 28090-2	g/cm ³	1.9
Compressibility	ASTM F36J	%	10
Recovery	ASTM F36J	%	58
Tensile strength	ASTM F1512	MPa	13
Residual stress	DIN 52913		
50 MPa, 175 °C, 16h		MPa	22
50 MPa, 300 °C, 16h		MPa	/
Specific leak rate	DIN 3535-6	mg/(s.m)	0.05
Thickness increase	ASTM F146		
Oil IRM 903, 150 °C, 5 h		%	8
ASTM Fuel B, 23°C, 5 h		%	9
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	/
At elevated temperature: $\epsilon_{WSW/200^\circ C}$		%	/
Creep relaxation	DIN 28090-2		
At room temperature: ϵ_{KRW}		%	/
At elevated temperature: $\epsilon_{WSW/200^\circ C}$		%	/
Maximum operating conditions			
Peak temperature		°C/°F	200/392
Continuous temperature		°C/°F	150/302
Pressure		bar/psi	60/870

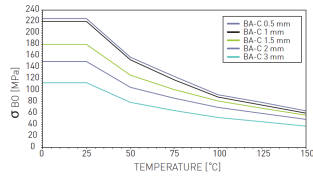
P-T diagram EN 1514-1, Type IBC, PN 40, DIN 28091-2 / 3.8, 2 mm



P-T diagrams indicate the maximum permissible combination of internal pressure and service temperature which can be simultaneously applied to a given gaskets thickness, size and tightness class. Given the wide variety of gasket applications and service conditions, these values should only be regarded as a guidance for the proper gasket assembly. In general, thinner gaskets exhibit better P-T properties.

- General suitability applying common installation practices under the condition of chemical compatibility.
- Maximum performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended. Limited application area. Technical consultation is mandatory
- Limited application area. Technical consultation is mandatory.

σ_{BO} DIAGRAMS DIN 28090-1



σBO diagrams represent σBO values for different gasket material thicknesses. These values indicate the maximum in-service compressive pressures which can be applied on the gasket area involved without destructing or damaging the gasket material.

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.

Legend: + Recommended ○ Recommendation depends on operating conditions, - Not recommended

Acetamide	+	Calcium chloride	+	Formamide	○	Methyl ethyl ketone (MEK)	○	Seawater/brine	+
Acetic ester	+	Calcium hydroxide	+	Formic acid, 10%	+	N-Methyl-pyrrolidone (NMP)	○	Silicones (oil/grease)	+
Acetic acid, 100% (Glacial)	+	Carbon dioxide (gas)	+	Formic acid, 85%	+	Milk	+	Soaps	+
Acetone	○	Carbon monoxide (gas)	+	Formic acid, 100%	+	Mineral oil type ASTM 1	+	Sodium aluminate	+
Acetonitrile	-	Castor oil	+	Freon-12 (R-12)	+	Motor oil	○	Sodium bicarbonate	+
Acetylene (gas)	○	Acetamide	○	Freon-134a (R-134a)	+	Naphtha	○	Sodium bisulfite	+
Acid chlorides	○	Chlorine (dry)	+	Freon-22 (R-22)	+	Nitric acid, 10%	+	Sodium carbonate	+
Acrylic acid	○	Chlorine (in water)	○	Fruit juices	+	Nitric acid, 65%	○	Sodium chloride	+
Acrylonitrile	-	Chlorine, 2% in water	+	Fuel oil	+	Nitrobenzene	-	Sodium cyanide	+
Adipic acid	+	Chlorobenzene	-	Gasoline	+	Nitrogen (Gas)	+	Sodium hydroxide	+
Air (gas)	+	Chloroform	○	Gelatin	+	Nitrous gases (NOx)	+	Sodium hydroxide, 50%, rt	+
Alcohols	+	Chloroprene	-	Glycerine (Glycerol)	+	Octane	+	Sodium hypochlorite (Bleach)	+
Aldehydes	○	Chlorosilanes	-	Glycols	+	Oils (Essential)	+	Sodium silicate (Water glass)	+
Alum	+	Chromic acid	○	Helium (gas)	+	Oils (Vegetable)	+	Sodium sulfate	+
Aluminium acetate	+	Citric acid	+	Heptane	+	Oleic acid	+	Sodium sulfide	+
Aluminium chlorate	+	Copper acetate	+	Hydraulic oil (Glycol based)	+	Oleum (Sulfuric acid, fuming)	○	Starch	+
Aluminium chloride	+	Copper sulfate	+	Hydraulic oil (Mineral)	+	Oxalic acid	+	Steam	+
Aluminium sulfate	+	Creosote	-	Hydraulic oil (Phosphate ester-based)	○	Oxygen (gas)	+	Stearic acid	+
Amines	○	Cresols (Cresylic acid)	○	Hydrazine	+	Palmitic acid	+	Styrene	-
Ammonia (Gas)	+	Cyclohexane	+	Hydrocarbons	+	Paraffin oil	+	Sugars	+
Ammonium bicarbonate	+	Cyclohexanol	+	Hydrochloric acid, 10%	+	Pentane	+	Sulfur	+
Ammonium chloride	+	Cyclohexanone	○	Hydrochloric acid, 37%	+	Perchloroethylene	○	Sulfur dioxide (Gas)	+
Ammonium hydroxide	+	Decalin	+	Hydrofluoric acid, 10%	+	Petroleum (Crude oil)	+	Sulfuric acid, 10%	+
Amyl acetate	○	Dextrin	+	Hydrofluoric acid, 48%	-	Phenol (Carbolic acid)	○	Sulfuric acid, 20%	+
Anhydrides	○	Dibenzyl ether	-	Hydrogen (gas)	+	Phosphoric acid, 40%	+	Sulfuric acid, 98%	○
Aniline	-	Dibutyl phthalate	+	Iron sulfate	+	Phosphoric acid, 85%	+	Sulfuryl chloride	-
Anisole	-	Diesel oil	+	Isobutane (Gas)	+	Phthalic acid	+	Tar	+
Argon (gas)	+	Diethyl ether	+	Isooctane	+	Potassium acetate	+	Tartaric acid	+
Asphalt	+	Dimethylacetamide (DMA)	-	Isoprene	+	Potassium bicarbonate	+	Tetrahydrofuran (THF)	-
Barium chloride	+	Dimethylformamide (DMF)	-	Isopropyl alcohol (Isopropanol)	+	Potassium carbonate	+	Titanium tetrachloride	-
Benzaldehyde	-	Dioxane	-	Kerosene	+	Potassium chloride	+	Toluene	+
Benzene	+	Diphyl (Dowtherm A)	+	Ketones	○	Potassium cyanide	+	2,4-Toluenediisocyanate	○
Benzoic acid	+	Esters	○	Lactic acid	+	Transformer oil (Mineral type)	+	Trichloroethylene	○
Bio-diesel	+	Ethane (Gas)	+	Lead acetate	+	Potassium hydroxide	+	Vinyl chloride (gas)	-
Bio-ethanol	+	Ethers	○	Lead arsenate	+	Potassium hydroxide, 20%, 80°C	+	Vinylidene chloride	-
Black liquor	+	Ethyl acetate	○	Magnesium sulfate	+	Potassium iodide	+	Water	+
Borax	+	Ethyl alcohol (Ethanol)	+	Maleic acid	+	Potassium nitrate	+	White spirits	+
Boric acid	+	Ethyl cellulose	+	Malic acid	+	Potassium permanganate	+	Xylenes	○
Butadiene (gas)	+	Ethyl chloride (gas)	+	Methane (Gas)	+	Propane (gas)	+	Xylenol	-
Butane (gas)	+	Ethylene (gas)	+	Methyl alcohol (Methanol)	+	Propylene (gas)	+	Zinc sulfate	+
Butyl alcohol (Butanol)	+	Ethylene glycol	+	Methyl chloride (Gas)	○	Pyridine	-		
Butyric acid	+	Formaldehyde (Formalin)	+	Methylene dichloride	○	Salicylic acid	+		

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.

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