

Attwater – Range of Gasket Materials

Attwater has many years' experience in the manufacture of bespoke gasket materials for customers to integrate into their own technologies.

This includes laminates with a steel core for use in the most demanding applications. All of these materials are now part of our standard product range.

As a Group we offer a full range of materials for gasket solutions, from Attwater & Sons' sheet materials for gaskets and washers through to sleeves and bushes made from Custom Composites' tubes. The whole range is specifically designed to give electrical isolation between pipeline sections and assemblies.



Range of Gasket Materials



	Property	Method	Unit	Rigid Laminates								Rubber Faced				Epoxy-Steel	
				B1	B4	B10	B12	B42	B30	G10	B36	B949	B9109	B9129	B9G10B9	G10B-SS	G11B-SS
General	Colour***	-	-	Sepia Brown	Brown	Straw	Straw	Off-white	Dark brown	Pea green	Yellow/green	Black**	Black**	Black**	Black**	Black**	Black**
	Density	-	g/cm ³	1.37	1.35	1.35	1.35	1.35	1.90	2.00	1.90	1.35	1.35	1.35	1.65	4.70	4.65
	Thermal Rating (continuous)	-	°C	105	100	115	115	130	155	120	155	90**	90**	90**	90**	155**	180**
Mechanical Tests	Compressive Strength	ISO 604	MPa	350	290	320	300	220	490	430	550	290*	320*	300*	430*	520**	550**
			ksi	50.7	42.0	46.4	43.5	31.9	71.0	62.3	79.7	42.0*	46.4*	43.5*	62.3*	75.4**	79.7**
	Tensile Strength	ASTM D638	MPa	103	94	36	47	94	130	250	310	41	37	32	250*	350**	395**
			ksi	15.0	13.6	5.2	6.8	13.6	18.9	36.3	45.0	6.0	5.3	4.7	36.3*	50.7**	57.3**
Electrical Tests	Electric Strength (flatwise)	IEC 60243 (rapid)	V/mil	380	100	150	75	204	330	600	710	255	255	255	600*	550**	604**
	Breakdown Strength	IEC 60243 (step-by-step)	kV	47	14.5	24	14.5	86	44	75	80	25	15	11	75*	75**	90**
	Insulation Resistance	IEC 60167	GΩ	6.0	0.025	0.2	0.3	6.0	7.6	17000	30000	4.5	0.4	1.4	17000*	17000**	30000**
Other Tests	Compressibility	ASTM F36	%	5.1	4.6	6.2	8.7	5.4	-	12.7	11.8	35.6	22.7	34.0	25.4	13.4	12.4
	Recovery	ASTM F36	%	85.6	92.2	83.2	83.0	84.4	-	92.9	94.4	64.3	78.6	66.2	72.0	94.7	95.4
	Rubber Hardness (shore)	-	-	-	-	-	-	-	-	-	-	85	90	90	85	-	-
Classifications	-	ASTM F104	-	F341001	F341001	F341001	F342001	F341001	-	F792001	F792001	-	-	-	-	-	-
	-	ASTM F868	-	-	-	-	-	-	-	-	-	0RBR2	0RBR2	0RBR2	0RBR2	0BMB2	0BMB2

SRBP	SRBF	SRBG	Rubber Faced	Steel Core
<p>Lower cost</p> <p>Good electrical properties</p> <p>Can be hot punched</p>	<p>Improved strength</p> <p>Generally better chemical resistance</p> <p>Medium temperature</p>	<p>Higher mechanical strength</p> <p>Higher temperature</p> <p>Excellent electrical properties</p> <p>Good chemical resistance</p>	<p>High performance sealing</p> <p>Combines the sealing properties of Neoprene with the strength & insulation properties of SRBP / SRBF & SRBG</p>	<p>Used in the most demanding / harsh applications & environments</p> <p>Excellent chemical resistance</p> <p>For use in higher loaded applications</p>

Notes: *applies to core material **applies to face material
 ***the colour of some materials will change with age/UV exposure. This is normal, and does not affect the performance of the material

Additional services offered

We can offer a “kitting service” and supply the various gaskets, bushes and washers in kit form. These can be bagged and labelled ready for sending out.

From within Attwater Group the gaskets, bushes and tubes can be supplied in a variety of ways and the details of the specific packing / kitting requirements can be discussed and agreed.

The range of gasket materials quoted is not exhaustive and we shall be pleased to work on the development of any bespoke / niche products as required. We have a history of working closely with customers and potential customers on many development

projects in a variety of sectors over the years. Let us see what we can do for you!

We have our own in-house testing facilities where we can offer some industry specific tests in addition to the routine BSEN testing performed on our range of laminates. We also work with customers where they ask for non-standard tests to be completed while products are being developed.

Our considerable technical expertise and experience makes us the ideal partner to work with in the Oil & Gas Sector.

