

Features

volans®

volans® is a spunbond polyester long fiber nonwoven fabric developed by Toyobo using its proprietary technology.

There are two types, needle punch type and resin impregnation type.

You can choose the most suitable type according to the usage.

- (1) Excellent function for tensile strength and tear strength.
- (2) Excellent dimensional stability.
- (3) Since it is made of polyester material, it has excellent heat resistance, weather resistance, water resistance, oil resistance, chemical resistance, etc.
- (4) Since it is needle punched and impregnated with resin, there is little delamination and excellent processability.



Specifications and Physical Properties

Standard Physical Properties

volans® < Needle Punch Type >

Part Number	Metsuk e (g/m ²)	Thickne ss (mm)	Tensile strength (N/5cm)		growth rate (%)		test method	tear strength (N)		dry heat shrinkage (%)	
			Tate	Yoko	Tofu	Yoko		Tate	Yoko	Tate	Yoko
6401N	42		60	44	66	84	S	22	17	3.4	2.6
4101N	101	1.6	259	229	67	69	S	70	69	3.2	2.5
4163N	167	1.7	509	388	74	80	S	142	171	1.4	1.3
4212N	210	2.1	716	727	76	75	S	177	174	2.8	2.3
4421N	432	4.2	1460	1548	80	71	S	404	355	1.3	1.8
4301NB	315	3.1	1054	1086	79	73	S	322	296	1.8	2.2
4451NB	480	4.5	1601	1637	84	80	S	409	408	1.3	1.9
4451NG	479	4.5	1485	1567	80	75	S	407	369	1.2	1.9
9501HB	578	4.9	2146	1609	95	100	S	731	923	0.7	0.6

Tear strength test method: S-single tongue method, P-pendulum method

Specifications and Physical Properties

Standard Physical Properties

volans® < Resin Impregnation Type >

Part number	Metsuk e (g/m2)	Thickne ss (mm)	Tensile strength (N/5cm)		growth rate (%)		test method	tear strength (N)		dry heat shrinkage (%)	
			Tate	Yoko	Tofu	Yoko		Tate	Yoko	Tate	Yoko
4050P/5083P	62	0.5	160	123	44	63	P	28	34	1.9	0.2
4058P	61	0.5	161	114	41	68	P	26	34	2.0	0.2
4080P	86	0.6	234	169	42	58	S	64	57	1.6	-0.1
4081P	93	0.6	301	195	25	34	S	29	33	0.8	-0.3
4088P	83	0.6	218	150	40	64	P	29	36	1.5	0.0
4124PB	126	1.1	338	194	38	51	S	105	81	0.5	-0.4
4141P	142	1.0	413	333	40	50	S	82	83	0.5	-0.2
4172P	178	1.2	590	470	42	47	S	110	104	0.5	-0.3
7093P	102	0.5	368	284	38	44	S	28	33	1.7	-0.2
7121P	121	0.7	377	272	26	37	S	49	55	0.5	-0.2
7157P	159	0.8	546	436	34	44	S	60	74	0.5	-0.1
7187P	183	0.9	622	520	36	44	S	73	89	0.4	-0.1
7217P	221	0.9	743	646	39	43	S	90	109	0.3	0.0

Tear strength test method: S-single tongue method, P-pendulum method

The above physical properties are standard values based on measurement according to JIS L-1913, and are not guaranteed values. The contents are subject to change without notice in order to improve the quality.

The results obtained by applying the information on this website and the safety and suitability of this product are not guaranteed. Customers should check the safety and suitability of this product according to its intended use. Please read the Product Safety Data Sheet (SDS) carefully before handling this product.

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