



REPORT <<< A >>> (SUMMARY)

ROUND: 2018-2
ISSUED BY: SMITHERS-PIRA

No.	PROPERTY	METHOD	LEVEL	UNIT	CEPI-A MEAN	SD WITHIN	SD REPROD	NUMBER OF QL's	WARNING LIMITS		ACTION LIMITS	
1.3	Grammage	ISO 536	1	g/m ²	60.2	0.31	0.13	11	59.9	60.5	59.9	60.5
			2		102	1.3	2.0	15	98	106	97	107
			3		300	1.9	2.7	15	294	305	293	307
2.3	Tearing resistance (Elmendorf)	ISO 1974	1	mN	343	14.7	15.9	13	311	375	302	384
			2		617	14.6	22.4	14	572	662	559	675
			3		1532	64	126	13	1280	1784	1205	1860
			4		2093	101	110	12	1873	2314	1806	2380
2.8	Flat crush resistance after laboratory fluting (CMT)	ISO 7263	1	N	210	6.8	19.3	11	172	249	160	261
			2		354	12.6	20.7	11	312	395	300	407
2.10	Puncture resistance	ISO 3036	1	J	4.05	0.099	0.537	8	2.98	5.12	2.65	5.45
			2		11.1	0.33	0.68	8	9.7	12.4	9.3	12.8
2.12	Folding endurance (Schopper)	ISO 5626	1	log ₁₀ (n D.F.)	2.16	0.121	0.158	8	1.85	2.48	1.75	2.57
			2		2.83	0.109	0.136	8	2.56	3.10	2.48	3.19
2.14	Bursting strength paper	ISO 2758	1	kPa	183	9.8	12.5	14	158	208	151	216
			2		400	15.2	18.5	12	363	437	352	448
			3		538	16.2	26.2	14	486	591	470	606
			4		688	30.8	41.2	14	605	770	581	795
2.15	Bursting strength board	ISO 2759	1	kPa	231	13.8	57.7	3	115	346	81	381
			2		440	21.1	40.6	13	359	521	334	546
			3		572	17.9	40.3	13	491	652	467	677
			4		716	27.6	36.7	12	643	789	621	811
			5		1513	65	68	13	1376	1650	1335	1691
2.18(a)	Tensile strength	ISO 1924-3	1	kN/m	4.59	0.209	1.608	11	1.37	7.81	0.41	8.77
			2		5.55	0.396	0.367	14	4.81	6.28	4.59	6.50
			3		14.5	0.45	0.16	13	14.2	14.8	14.1	14.9
2.18(b)	Tensile stretch	ISO 1924-3	1	%	1.74	0.177	0.289	9	1.16	2.32	0.99	2.49
			2		8.24	0.663	0.689	14	6.86	9.62	6.45	10.03
			3		2.22	0.109	0.413	14	1.39	3.04	1.14	3.29
2.18(c)	Tensile energy absorption (TEA)	ISO 1924-3	1	J/m ²	61.8	8.52	8.27	10	45.2	78.3	40.3	83.3
			2		308	34.3	36.1	13	236	380	214	402
			3		208	16.9	39.1	13	130	286	106	309
2.18(d)	Tensile stiffness	ISO 1924-3	1	kN/m	416	23.5	201.0	8	14	818	-106	939
			2		348	18.5	43.8	10	261	436	234	462

			3		1366	40	224	10	918	1814	784	1949
3.1	Bending stiffness resonance method	ISO 5629	1 2 3 4	mNm	0.568 7.99 31.7 82.9	0.0353 0.277 0.94 2.64	0.0588 0.565 2.85 4.93	8 8 8 8	0.451 6.86 26.0 73.1	0.686 9.12 37.4 92.8	0.415 6.52 24.3 70.1	0.721 9.46 39.1 95.7
4.3	Roughness Parker Print-surf	ISO 8791-4	1 2 3	µm	0.955 2.98 4.12	0.0390 0.112 0.139	0.0446 0.624 0.639	6 7 7	0.866 1.73 2.84	1.044 4.23 5.40	0.839 1.36 2.46	1.071 4.60 5.78
8.2	Tissue, Tensile strength after immersion in water	ISO 12625-5	1 2	N/m	36.5 84.2	2.53 6.08	4.39 2.81	9 9	27.7 78.6	45.3 89.9	25.1 76.9	47.9 91.6
8.5(a)	Tissue, Tensile strength	ISO 12625-4	1 2	N/m	118 615	8.0 24.4	6.3 15.8	9 9	106 584	131 647	102 574	135 656
8.5(b)	Tissue, Stretch at break	ISO 12625-4	1 2	%	18.3 14.8	1.26 0.94	0.63 0.75	9 9	17.0 13.3	19.5 16.3	16.6 12.8	19.9 16.7
10.3	Relative humidity	ISO 187	1	%	0.4	-	1.72	9	-3.0	-3.9	-4.0	-4.9

Signed by Mr. G. Collis
for SMITHERS-PIRA as a member of the
CEPI Comparative Testing Service

Date: 11-10-2018