Iberográfica Capa Rota - Portugal	Brand D 2Ply Construction	**Compressibility** Deflection	Doc. PROC - LAB - 014 Data: 02 - 02 - 2012 Folha. 1 de 1 Rev. 0

Item #	Brand/ /Model	Sample #/ / Batch #	D0	D01	D04	D4k/2	D5k/2	D1k	D4k	D5k	D1	D4	D5	Df1	Df5	Dfp1	Dfp5	Comp. Loss	Gauge Loss @ 1st Cycle 1 60kPa		1060kPa	2060kPa	Hysteresis Wk/2	Wk	Elastic Energy (HE)Nmm	Elastic Energy (EE)Nmm	Damping Capacity (DC) %	Test Time s
			Thickness											Deflection					1st%									
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	µm	µm	%	%	%	µm		µm	µm	µm	µm				
1	D/II	18F/102893	1,96	1,89	1,88	1,73	1,77	1,71	1,65	1,68	1,57	1,56	1,56	390	321	19,9	17,1	17,8	67	83,8	80	33	10	32	30	32,8	197,4	16,6	185,9
2	D/II	37F/102893	1,95	1,88	1,87	1,71	1,75	1,69	1,63	1,66	1,55	1,54	1,54	393	326	20,2	17,5	17,0	65	81,9	80	32	13	31	29	31,5	196,9	16,0	188,9
3	D/II	38F/101419	1,94	1,88	1,87	1,72	1,75	1,70	1,64	1,67	1,56	1,55	1,55	382	322	19,7	17,2	15,8	60	85,0	71	32	11	30	28	27,2	194,5	14,0	186,0
4	D/I	39F/88811	1,95	1,89	1,88	1,73	1,76	1,70	1,64	1,67	1,56	1,55	1,55	389	324	19,9	17,3	16,7	64	84,5	76	33	11	31	31	30,5	198,2	15,4	187,4
5	DIX	51F/-	1,96	1,89	1,88	1,72	1,76	1,70	1,63	1,66	1,55	1,54	1,54	402	335	20,6	17,8	16,7	65	83,7	78	34	10	37	32	30,9	201,6	15,3	193,9
6	D/II	Ca1/892171	1,95	1,89	1,88	1,73	1,76	1,71	1,65	1,68	1,57	1,56	1,56	385	321	19,7	17,1	16,6	62	83,7	74	33	10	32	31	29,0	195,1	14,9	183,3

LEGEND

Test Details

Standard:
ISO 12636 section 4.4

Equipment:
Lloyd LR 10K Plus
Speed: 1 mm/min
Test Time: (D5-D0) s

Thickness

D0; D01; D04: @ 60kPa
D4k/2; D5k/2: @ 560kPa
D1k; D4k; D5k: @ 1060kPa
D1; D4, D5: @ 2060kPa

Deflection (@ 2060kPa)

Df1 = (D0 - D1) mm
Df5 = (D04 - D5) mm

Dfp1 = [((D0 - D1) / D0) * 100] %
Dfp5 = [((D04 - D5) / D04) * 100] %

Compressive Loss

Deflection reduction from the 1st to the 5th compression cycles.
CL = [((Df1-Df5) / Df1)*100] %

Gauge Loss @

60kPa: 1stCycle: (D0 - D01) µm
1st%: 1stCycle/Full Test %
[((D0 - D01)/(D0 - D04))*100]%
Full Test: (D0 - D04) µm
1060kPa: (D1k - D5k) µm
2060kPa: (D1 - D5) µm

Hysteresis

Values valid for a specific stress cycle
W(window): Gauge variation due to stress history
Wk/2: Gauge variation@560kPa (D5k/2-D4k/2) µm
Wk: Gauge variation@1060kPa (D5k-D4k) µm
HE: Heat generated in one cycle (D5-D4) Nmm
EE: Elastic deformation energy (D5-D04) Nmm
DC: Damping Capacity [((D5-D4)/(D5-D04))*100] %