



Research & Development



Product Specification

S.No.	Properties	UOM	Product Quality : Napkin											
			2 Ply	1 PIY	2 Ply	1 Ply	2 Ply	1 PLY	2 Ply	1 PIY	2 Ply	1 PIY	2 Ply	
1	No of Ply													
2	Substance (1 Ply)	g/m ²	14 ± 0.5	15 ± 0.5	15 ± 0.5	16 ± 0.5	16 ± 0.5	16.5 ± 0.5	16.5 ± 0.5	17 ± 0.6	17 ± 0.6	18 ± 0.6	18 ± 0.6	
3	Thickness (1 PLY)	Micron	84 ± 10	90 ± 10	90 ± 10	96 ± 10	96 ± 10	99 ± 10	99 ± 10	102 ± 10	102 ± 10	108 ± 10	108 ± 10	
4	*Bulk	CC/gm	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	6.0 ± 0.5	
5	*Dry Tensile Strength	MD	gf/25mm	540 ± 100	370 ± 100	700 ± 100	390 ± 100	770 ± 100	410 ± 100	800 ± 100	460 ± 100	870 ± 100	520 ± 100	970 ± 100
		CD	gf/25mm	300 ± 50	250 ± 50	470 ± 50	260 ± 50	515 ± 50	275 ± 50	533 ± 50	310 ± 50	580 ± 50	350 ± 50	650 ± 50
6	MDT/CDT RATIO		1.8 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	
7	Stretch	MD	%	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	15 ± 2	
8	*Wet Tensile Strength	MD	gf/50mm	86 ± 30	60 ± 30	110 ± 30	66 ± 30	130 ± 30	70 ± 30	136 ± 30	75 ± 30	160 ± 30	95 ± 30	175 ± 30
9	Wet / Dry Tensile		%	16 ± 2	16 ± 2	16 ± 2	17 ± 2	17 ± 2	17 ± 2	17 ± 2	18 ± 2	18 ± 2	18 ± 2	
10	*ISO Brightness		% ISO	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2	
11	Shade	-	Natural											
12	Furnish	-	Virgin pulp											
13	Core (ID)	mm	76											
14	Number of joints	-	70% ZERO JOINT, 20% ONE JOINT 10% TWO JOINTS											
15	Reel Diameter	mm	± 10 % of Actual ordered reel dia.											

*Note : If goes beyond higher side tolerance, Quality is OK.

Test Conditions : Temperature 23 ± 1°C & Relative Humidity 50± 2 % (Tappi 402)

All properties are as per CPP Lalkua measurements

Tolerance are based upon 95 % confidence limits of single mill measurement on conditioned Random samples

An ISO 9001,ISO 14001 & ISO 45001 Company.

Recommended by	Approved by		Issued by Management Representative	Issue Date 01.09.2023	Revision No 03	Page 1 of 2	Doc No SPC-III-41 (M-5)
DGM (QA/R&D)	Head Process						
	CSO						
	CEO						



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Product Specification

S.No.	Properties		UOM	Product Quality : Napkin												
				1 PIY	1 PIY	1 PIY	2 Ply	1 Ply (High Wet)								
1	No of Ply															
2	Substance (1 Ply)		g/m ²	19 ± 0.6	20 ± 0.6	21 ± 0.6	24 ± 0.6	15 ± 0.5								
3	Thickness (1 PLY)		Micron	105 ± 10	110 ± 10	110 ± 10	120 ± 10	90 ± 10								
4	*Bulk		CC/gm	5.5 ± 0.5	5.5 ± 0.5	5.2 ± 0.5	5.0 ± 0.5	6.0 ± 0.5								
5	*Dry Tensile Strength	MD	gf/25mm	550 ± 100	580 ± 100	625 ± 100	1500 ± 100	550 ± 50								
		CD	gf/25mm	370 ± 50	375 ± 50	400 ± 50	1000 ± 50	215 ± 25								
6	MDT/CDT RATIO			1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	1.5 ± 0.2	2.5 ± 0.1								
7	Stretch	MD	%	15 ± 2	15 ± 2	16 ± 2	16 ± 2	25 ± 2								
8	*Wet Tensile Strength	MD	gf/50mm	100 ± 30	115 ± 30	160 ± 30	350 ± 30	165 ± 30								
9	Wet / Dry Tensile			18 ± 2	20 ± 2	23 ± 1	23 ± 1	30 ± 2								
10	*ISO Brightness(Frank, PTI)		% ISO	87 ± 2	87 ± 2	87 ± 2	87 ± 2	87 ± 2								
11	Shade		-	Natural												
12	Furnish		-	Virgin pulp												
13	Core (ID)		mm	76												
14	Number of joints		-	70% ZERO JOINT, 20% ONE JOINT 10% TWO JOINTS												
15	Reel Diameter		mm	± 10 % of Actual ordered reel dia.												

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Test Conditions : Temperature 23 ± 1°C & Relative Humidity 50± 2 % (Tappi 402)

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