



Research & Development



Product Specification

S.No.	Properties		UOM	Product Quality : Tuff Care								
1	No of Ply			1 Ply								
2	Substance (1 Ply)		g/m2	28 ± 0.8	30 ± 0.8	32 ± 0.8	35 ± 0.9	36 ± 0.9	37 ± 0.9	38 ± 0.9	40 ± 1	42 ± 1
3	Thickness (1 Ply)		Micron	106 ± 10	114 ± 10	122 ± 10	133 ± 10	137 ± 10	140 ± 10	145 ± 10	150 ± 10	158 ± 10
4	*Bulk		cc/gm	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5	3.8 ± 0.5
5	*Dry Tensile Strength	MD	gf/25mm	1100 ± 100	1200 ± 100	1300 ± 100	1800 ± 100	1900 ± 100	2000 ± 100	2100 ± 100	2200 ± 100	2300 ± 100
	Dry Tensile Strength	CD	gf/25mm	650 ± 50	710 ± 50	750 ± 50	1050 ± 50	1100 ± 50	1175 ± 50	1225 ± 50	1300 ± 50	1350 ± 50
6	MDT/CDT RATIO			1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2	1.7 ± 0.2
7	Stretch	MD	%	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0	12.0 ± 2.0
8	*Wet Tensile	MD	gf/50mm	462 ± 42	504 ± 42	546 ± 42	756 ± 42	800 ± 42	850 ± 42	885 ± 42	925 ± 42	975 ± 42
9	Wet / Dry Tensile		%	42 ± 2	42 ± 2	42 ± 2	42 ± 2	42 ± 2	42 ± 2	42 ± 2	42 ± 2	42 ± 2
10	*ISO Brightness(Frank, PTI)		% ISO	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.01	Page No 1 of 1	Doc. NO. SPC-III-77(M-5)
DGM (QA/R&D)	Head (Process)						
	CSO						
	CEO						