

# TECHNICAL SPECIFICATIONS

S.No.	PROPERTIES	TEST STANDARD	UNIT	SPECIFIED VALUES	AIROLAM VALUES	SPECIFIED VALUES	AIROLAM VALUES
1	Classification & Test Protocol	IS 2046 : 1995		HGS, Thickness 1.0 mm		HGS, Thickness 1.5 mm	
PHYSICAL & DIMENSIONAL PROPERTIES							
2	Nominal Thickness		mm	1.0		1.5	
3	Thickness variation	Clause - 5.3	mm	1.0 ± 0.10	Conforms	1.5 ± 0.15	Conforms
4	Tolerance on Length	Clause - 5.4.6	mm	+10, -Nil	Conforms	+10, -Nil	Conforms
5	Tolerance on Width	Clause - 5.4.6	mm	+10, -Nil	Conforms	+10, -Nil	Conforms
6	Straightness of edges	Clause - 5.4.7	mm/m	1.5 (max.)	Conforms	1.5 (max.)	Conforms
7	Squareness	Clause - 5.4.8	mm/m	1.5 (max.)	Conforms	1.5 (max.)	Conforms
8	Density	EN ISO 1183 -1:2004	kg/m3	1360 - 1400	Conforms	1360 - 1400	Conforms
9	Dimensional Stability at Elevated Temperatures						
	Longitudinal Direction	Annex - F	%	0.55 (max.)	Conforms	0.44 (max.)	Conforms
	Transverse Direction	Annex - F	%	1.05 (max)	Conforms	0.86 (max)	Conforms
10	Dimensional Stability at 20°C						
	Longitudinal Direction	Annex - G	%	0.38 (max.)	Conforms	0.32 (max.)	Conforms
	Transverse Direction	Annex - G	%	0.60 (max)	Conforms	0.48 (max)	Conforms
MECHANICAL PROPERTIES							
11	Resistance to Immersion in Boiling Water						
	Mass Increase	Annex - D	%	10.0 (max.)	Conforms	7.5 (max.)	Conforms
	Thickness Increase	Annex - D	%	11.8 (max.)	Conforms	8.0 (max.)	Conforms
	Appearance	Annex - D	Grade	Not worse than 4	Conforms	Not worse than 4	Conforms
12	Resistance to Impact by Small Diameter Ball						
	Spring Force	Annex - H	N	20	Conforms	20	Conforms
13	Resistance to Cracking	Annex - K	Grade	Not worse than 4	Conforms	Not worse than 4	Conforms
SURFACE PROPERTIES							
14	Resistance to Scratching	Annex - L	N	2.0 (min.)	Conforms	2.0 (min.)	Conforms
15	Resistant to Steam	Annex - T	Grade	Not worse than 4	Conforms	Not worse than 4	Conforms
16	Resistance to Water Vapor	EN 438-2-14	Class	Not worse than 4	Conforms	Not worse than 4	Conforms
17	Resistance to Dry Heat at 180° C						
	Gloss Finish	Annex - E	Grade	Not worse than 3	Conforms	Not worse than 3	Conforms
	Other Finish	Annex - E	Grade	Not worse than 4	Conforms	Not worse than 4	Conforms
18	Resistance to Surface Wear	Annex - C	Rev.	350 (min.)	Conforms	350 (min.)	Conforms
19	Resistance to Cigarette Burns	Annex - P	Grade	Not worse than 3	Conforms	Not worse than 3	Conforms
20	Resistance to staining						
	Group 1 & 2	Annex - M	Grade	Not worse than 5	Conforms	Not worse than 5	Conforms
	Group 3 & 4	Annex - M	Grade	Not worse than 4	Conforms	Not worse than 4	Conforms
21	Resistance to Color Change						
	In Xenon Arc Lamp	Annex - N	Grade	Not worse than 6	Conforms	Not worse than 6	Conforms
HEALTH & ENVIRONMENTAL CHARACTERISTICS							
22	Food safe	EN 13130-1	-	-	YES	-	YES
23	Contents' migration as per Food Commission Regulation	EN 1186-1, 3 & 14: 2002	Migration	Migration of Simulants is less than maximum permitted by Regulation			
24	Formaldehyde emission (release)	EN 16516-2017	ppm	0.1	0.02	0.1	0.02
25	Volatile Organic Compounds (VOC) Emission	ISO 16000-9	Class	-	A	-	A
		UL 2818 - 2013	Certification				
26	Anti-Viral Efficacy & activity						
	% Reduction in 24 hours	ISO 21702-2019	%	95% (min.)	99.9% (min.)	95% (min.)	99.9% (min.)
	Activity after 24 hours		Log Reduction	2.0 (min.)	Exceeds	2.0 (min.)	Exceeds
27	Anti-bacterial Efficacy & activity						
	% Reduction in 24 hours	JIS 2801-2012	%	95.0 (min)	99.99	95.0 (min)	99.99
	Activity after 24 hours		Log Reduction	2.0 (min)	Exceeds	2.0 (min)	Exceeds
28	Anti-Fungus Efficacy						
	Growth after 28 days	ASTM G-21-2015	Class	1	0 (No Growth)	1	0 (No Growth)

NOTE: Whereas the AIROLAM Laminates products are manufactured to thorough standards, the nature of the application procedure is beyond our control. The values given above are to the best of knowledge but without liability/warranty, expressed or implied.