

Test Values of Merino Chem+ Grade Laminate as per (EN438-3)
Thickness :1.00mm

<i>Properties</i>	<i>Test Method as per EN 438-2 CLAUSE NO.</i>	<i>Property or attribute</i>	<i>Unit (max or min)</i>	<i>Values as per EN 438-3</i>	<i>Merino Value</i>
Thickness Maximum Variation	5		mm	±0.10mm	±0.10mm
Length & Width	6		mm	+10mm -0.0mm	+10mm -0.0mm
Density	EN ISO 1183	Density	g/cm ³	≥1.35	>1.35
Resistance to Surface wear	10	Wear Resistance	Revolution (min)	≥350	>500
Resistance to Impact by Small diameter Ball	20	Spring Force	N(min)	≥20	>20
Resistance to Scratching	25	Force	Rating (see annex a)	3	≥3
Dimensional stability at elevated temperature	17	Cumulative dimensional change	% long % Cross	≤ 0.55 ≤ 1.05	<0.45 < 0.90
Resistance to immersion in boiling water	12	Appearance	Grade (min)	4	>4
Resistance to dry Heat at 180°C	16	Appearance	Grade (min)	4	>4
Resistance to Staining	26	Appearance	Rating Group-1&2 Group-3	≥5 ≥4	5 ≥4
Resistance to water vapor	14	Appearance	Grade (min)	4	>4
Light Fastness (Xenon arc)	27	Contrast	Gray Scale Rating	4 to 5	>4
Resistance to cigarette burn	30	Appearance	Grade (min)	3	>3
Resistance to Cracking under stress (optional)	23	Appearance	Grade (min)	4	>4

1) List of Chemicals: Merino Chem.+ Lab grade Laminate is Resistance to:

- A) ACIDS:** 1. Glacial Acetic Acid 99 % 2. Formic Acid-85% 3. Hydrochloric Acid-36% 4. Nitric Acid-65 % 5. Sulfuric Acid-96% 6. Citric Acid-10%
- B) ALKALIS:** 1. Ammonium Hydroxide-28 % 2. Potassium Hydroxide-15% 3. Sodium Hydroxide- 40% 4. Sodium Sulphide-15%
- C) GENERAL REAGENT:** 1. Sodium Hypochlorite-5 % 2. Hydrogen Peroxide-3% 3. Sucrose-50% 4. Mineral Oil 5. Vegetable Oil 6. Ethylene Glycol 7. Benedics solution. 8. Trisodium Phosphate
- D) SOLVENT:** 1. Acetone 2. Benzene 3. Carbon tetrachloride 4. Ethyl Acetate 5. Ethyl Methyl ketene 6. Tolune 7. Xylene.
- E) HOSPITAL & HELTH CARE:** 1. Amyl Alcohol 2. Aniline Blue 3. Chloroform 4. Ethyl Alcohol 5. Iodine Tincture 6. Isopropyl Alcohol 7. Tincture Benzene Compound 8. Zink Oxide 9. PVP Iodine Swab.
- F) HOUSE HOLD PRODUCTS:** 1. Ceramic Cook top Cleaner 2. Cook top cleaning cream 3. Chlorine Bleaches 4. Coffeepot cleaners 5. Hair coloring 6. Nail Polishes 7. Shoe Polishes 8. Lime Removers 9. Metal cleaners 10. Stain remover 11. Rust Remover 12. Oven Cleaners 13. Toilet Bowl Cleaners. 14. Sami-flush 15. Pencil 16. Wax Crayon. 17. Yellow Mustard.

2) Durability- Merino Chem. + Lab Grade Laminate provide a highly durable surface And has better Abrasion & Scratch Resistance.

Note: All our products comply to applicable standards, but results may differ based on the application and handling of the product. Please Refer <http://www.merinolaminates.com/warranties.aspx> for warranty clauses.