Polytec Laminates Sdn. Bhd.

March, 2025

polytec laminates

Technical Data Sheet

COMPACT laminate

COMPACT laminate / Technical Data Sheet

GENERAL INFORMATION

polytec's high pressure Compact Laminate (CL) is the ultimate in long lasting, low maintenance decorative panels, for the most demanding hardworking environments.

FEATURES AND BENEFITS

- Tough and durable
- Distinctive black core
- Sheet sizes: 3660 x 1830mm;
  4270 x 1830mm
- Available in 5mm up to 20mm substrate
- Outstanding stain and wear resistance
- Impervious to water

PHYSICAL PROPERTIES

PROPERTY	STANDARD	RESULT
Density	ISO 1183-1	≥ 1350 kg/m^3
Panel Tolerance	EN 438-4	
Length		+ 10 mm, - 0 mm
Width		+ 10 mm, - 0 mm
Thickness		
5.0 ≤ *t* ≤ 8.0 mm		≤ ± 0.40 mm
8.0 ≤ *t* ≤ 12.0 mm		≤ ± 0.50 mm
12.0 ≤ *t* ≤ 16.0 mm		≤ ± 0.60 mm
16.0 ≤ *t* ≤ 20.0 mm		≤ ± 0.70 mm
(where *t* is nominal thickness)		
Colour Stability	EN 438-4	≥ 4
Thickness Swell (24 Hours)	EN 317	≤ 0.1 %
Flexural Strength	ISO 178	≥ 80 MPa
Tensile Strength	ISO 527-2	≥ 60 MPa
Resistance to Surface Wear (Initial Point)	EN 438-4	≥ 150 revolutions
Resistance to Immersion in Boiling Water	EN 438-4	≥ 4
Resistance to Water Vapour	EN 438-4	≥ 4
Resistance to Dry Heat (160°C)	EN 438-4	≥ 4
Resistance to Impact (Large Diameter Ball)	EN 438-4	
2.0 ≤ *t* ≤ 6.0 mm		≥ 1400 mm
6.0 ≤ *t* mm		≥ 1800 mm
(where *t* is nominal thickness)		(Drop Height)
Resistance to Scratch	EN 438-4	≥ 3
Resistance to Staining	EN 438-4	
Group 1+2		5
Group 3		≥ 4
Dimensional Stability at Elevated Temperature	EN 438-4	
2.0 ≤ *t* ≤ 5.0 mm		L ≤ 0.4 % T ≤ 0.8 %
5.0 ≤ *t* mm		L ≤ 0.3 % T ≤ 0.6 %
(where *t* is nominal thickness)		
Flatness	EN 438-4	
2.0 ≤ *t* ≤ 6.0 mm		≤ 8.0 mm/m
6.0 ≤ *t* ≤ 10.0 mm		≤ 5.0 mm/m
10.0 ≤ *t* mm		≤ 3.0 mm/m
(where *t* is nominal thickness)		

CHEMICAL RESISTANCE PERFORMANCE

polytec high pressure Compact Laminate (CL) are resistant to most common chemicals and substances. Test results meet the requirements of Standard EN 438-4 which specifies resistance to staining on surfaces which are encountered in daily usage and some aggressive materials commonly used in laboratories. **polytec** Compact Laminate products should always be protected against direct sunlight as continuous exposure may cause discolouration or fading over time.

polytec always recommend prompt clean-up of all spills on its decorative surfaces and the surface maintained in accordance with our Care & Maintenance instructions.

No visible effects

Water, alcohol (96%), isopropanol, Petrol, amyl acetate, acetone, household soap, detergents for dishwashing by hand, ammonium hydrate (10%), ketchup, cooking oil, trisodium phosphate (1%), coffee, tea, milk, acetic acid, caustic soda (<10%), citric acid (10%), wine, lipstick, grapefruit juice, wax, shoe polish, ink ballpoint pen, spirit dye pen, marking ink, hand cream

Slight Effect/No Effect if completely removed within 10-15 minutes

Hydrogen Peroxide (30%), hypochloric bleach, hair dye, mercury chromate (2%), iodine (0.1%), hydrochloric acid (<10%), caustic soda (>10%)

Surface attack/necessitating immediate removal

Hydrochloric Acid (>10%), nitric acid (>10%), Sulphuric Acid (>10%)

polytec Compact laminate is moisture resistant and durable. However Compact laminate should not be immersed in or be exposed to water for lengthy periods as this may cause moisture permeation.

ENVIRONMENTAL AND SAFETY

polytec is committed to ensuring that its products can be manufactured, transported, stored, used, disposed and recycled with an appropriate regard for safety, health and environmental protection. We support the safe handling of our products.

CONTACT

For further information contact:

Polytec Laminates

Address No. 1, Jalan Teknologi Utama,
Kawasan Perindustrian Mengkibol,
86000 Kluang, Johor, Malaysia

Telephone +60 (7) 776 2600

Fax +60 (7) 776 2608

Whilst the information contained in this document is based on data, which, to the best of our knowledge, was accurate and reliable at the time of preparation, we can accept no responsibility for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, we can accept no responsibility for any loss or damage caused by any person acting or refraining from action as a result of this information