

PROWANG[®] PVC Sheet Quality Standard

Physics, Chemical, Mechanical & Organism Test

Items	Test Methods	Test Results
The resistance of Chemical Reagents (corrosion resistance)	CNS 4447 10% HCL / 168 hours 10% NaOH / 168 hours	No apparent change in appearance of the sample is observed with test.
Formaldehyde Solution (CH ₂ O)(CAS No.: 0000050-00-0)	With reference to DIN 53315 and performed by HPLC/DAD	Not Detected
Volatile Organic Compound (VOCs)	With reference to US EPA 5021 and performed by GC/MS	Not Detected
Flexural Strength Test	CNS 4458 (100kgf/cm ²) CNS 3904 (242kgf/cm ²)	No cracks and broken
Impact Test	CNS 12093 (5kg falling ball falling from the height of 1.2 meters)	No cracks and broken
Flammability Test	UL94 V-0, UL94 V-1 & UL94 V-2	Pass UL94 V-0 (20mm Vertical Burning Test)
Anti-Flaming Test	CNS 7614(A) #1 #2 #3	Pass CNS 7614 Flammability Class 1
Deflection Temperature (The highest temp. is about 120°C in continuous uses.)	ASTM D1525-09 ASTM D648-07	PVC sheet deflection temperature: 84.7°C
Coefficient of Effective Thermal Conductivity	ISO 22007-2	0.228W/m.K
UV-Ray Penetrability (UV-Grade apply)	Wave length 300nm(UV/VIS)	MEAN: 1.98%
Electric Field Intensity Strength Test	JIS K6911	4.08Kv/mm
Surface Resistivity Test (The highest voltage is about 500V in continuous uses.)	ASTM D257-07	MEAN: 2.6599 x 10 ¹⁶ Ω
Volume Resistivity Test (The highest voltage is about 500V in continuous uses.)	ASTM D257-07	MEAN: 1.5304 x 10 ¹⁶ Ω
Waterproof Test - Whole Water Absorption Rate	CNS 4458 #1 #2 #3	MEAN: 0.083%
Waterproof Test - Moisture Content	CNS 4458 #1 #2 #3	MEAN: 0.013%
Mildew proof Test	ASTM G21 Aspergillus Niger ATCC 9642 Penicillium pinophilum ATCC 11797 Chaetomium globosum ATCC 6205 Gliocladium Virens ATCC 9645 Aureobasidium ATCC 15233	No apparent change in appearance of the sample is observed with test.