

## TECHNICAL DATA SHEET

### Velvet/Gloss Polycarbonate Film

Product Name & No: **VX31**



### Product Description

VX31 is a one side velvet, one side polished transparent polycarbonate film. It offers high temperature resistance, excellent dimensional stability, as well as good printability without pretreatment making it very suitable for multi-layer printing for applications such as overlays, floor graphics, high-performance labels and in-mold decoration. It can be screen printed using traditional solvent based or water based inks, as well as UV or infrared drying inks and offers ease of processing for thermoforming, embossing, die-cutting, hydro-forming and bending. The velvet texture offers mar resistance, and can be used over light-emitting devices (LEDs).

### Product Datasheet

Item	Property	Value	Unit	Test Method
Physical	Specific Gravity	1.2	g/cm <sup>3</sup>	ISO 1183
	Haze	>80	%	ASTM D1003
	Transmittance	88	%	ASTM D1003
	Surface Tension	>38	dyn/cm	
	Surface Pencil Hardness	2B~B		
Mechanical	Tensile Strength	62	MPa	ISO 527
	Elongation at Break	>50	%	ISO 527
	Tensile Modulus	2330	MPa	ISO 178
	Flexural Strength	88	MPa	ISO 178
Electrical	Dielectric Strength	30	KV/mm	ASTM D149
	Surface Resistance	1.00E+16	Ω/square	ASTM D257
	Volume Resistance	1.00E+17	Ω-cm	ASTM D257
Thermal	Coefficient of Thermal Expansion	5.8	x10 <sup>-5</sup> /°C	ISO 11359
	Thermal Conductivity	0.2	W/(m*K)	ASTM D5470
	Thermal Shrinkage	0.5~0.7	%	ASTM D1204
	Brittle Temperature	-135	°C	ASTM D746
	Glass Transition Temperature	153	°C	ISO 11357
	Continuous Service Temperature	-60~125	°C	UL746B
Flammability		V-2/VTM-2		E249605

Tip: This test data is for reference only, not as an absolute application index.