

 <p>JALITE[®] Photoluminescent Safety Products</p>	<p>JALITE PLC Wins House, Bentalls Pipps Hill Industrial Estate Basildon, Essex, SS14 3BS, UK Tel: (44) 0 1268 242300 Fax: (44) 0 1268 274148 Email: sales@jalite.com</p>	<p>JALITE USA 190 Old Milford Milford, PA 18337 USA Tel: (1) 570 296 6906 Fax: (1) 570 296 5656 Email: sales@jaliteusa.com</p>	<p>JALITE ASIA 528 Ocean Centre 5 Canton Road, Tsimshatsui Kowloon, Hong Kong Tel: (852) 3426 9266 Fax: (852) 3528 0757 Email: sales@jalite-asia.com</p>
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JALITE AAA CLASS SELF ADHESIVE VINYL MATERIAL SPECIFICATION

NON-RADIOACTIVE PHOTOLUMINESCENT MATERIALS FOR SAFETY SIGNS AND SAFETY WAY-GUIDANCE COMPONENTS.

Description:

Non-Radioactive photoluminescent material of three layer PVC construction consisting of a reverse coated white reflective base layer with acrylic adhesive, a middle layer containing a non-radioactive non-toxic chemical phosphor, and covered with a clear protective layer.

Material Properties:

Properties	Test method	Unit	Characteristic value
Colour	-	-	Yellow / Green
Thickness	DIN 53370	mm	0.4
Shrinkage	DIN 53377 (80°C / 10 min)	%	< 3
Tensile stress at break	ISO EN DIN 527-1-2	%	> 200
Surface hardness	DIN 53505	Shore D	approx. 50
Scratch resistance	DIN 68861-4 (Erichsen 413)	N	2,0
Abrasion resistance	DIN 68861-2 (Taber 5131)	revolutions	1500 (without change of photoluminescence)
Rigidity test	ISO 17398		flexible
De-lamination strength of all layers	ISO 17398	N / 25mm	Not detectable, material breaks
Gloss	ISO 17398	60%	Low / Intermediate
Photoluminescence	ISO 17398	mcd/m ²	See table 1
Fire test	DIN 53438-3	class	F1
	BS EN ISO 4589-2	% (applied to HPL substrate)	37.2

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Artificial weathering	EN ISO 105-A02		The exposed areas were slightly darker after exposure. Contrast ratio: grade < 5
Resistance against salt spray test	DIN 50021 Exposure time: 120h		no visible change
Resistance to climatic conditions	ISO 17398		-25°C: no visible change +80°C: no visible change
Resistance to humidity	ISO 17398		no visible change
Water resistance	ISO 17398		no visible change
Resistance to test liquids	ISO 17398	Grade (5 =no vis. change 1=surface destroyed)	Distilled Water (W): 5 Detergent solution (L): 5 General cleaner (K): 5 Transformer oil (T): 5 White spirit (B): 5 Antifreeze (F): 5 Diesel fuel (D): 5
Chemical resistance against cold liquid	DIN EN 12720	Grade (5 =no vis. change 1=surface destroyed)	Acetone: 3-4 1:1 Butyl-/Ethylacetate: 2 Ethanol 48%: 5 Ethanol 96%: 5
Wipe resistance	ISO 17398		no visible change
Adhesive strength	ISO 17398		> 50 N/25mm
Plasticizer migration			Not measurable
Volatiles	The ingredients of the different layers have been classified as non critical for the human being. Moreover, GC-ECD and GC-MS measurements of the material heated to a temperature of 80°C do not show any critical peaks.		

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Table 1: Luminance Performance

Excitation, lux level and time	2 minutes		10 minutes		30 minutes		60 minutes		Time to 0.3mcd/m ² (min)	
	1000 lux for 5 minutes (DIN 67 510 / PSPA)	1108	690	214	140	59	45	24	20	2200
21.5 lux for 120 minutes (NYC RS6-1)	-	-	57	30	-	-	11	7	90 min	
									7	5

Jalite C Class Material
 Standard Requirement

Luminance results are measured in mcd/m²

N.B. All values at all decay times are evaluated from mean readings of standard production data.