

Subliclear

SubliStyle
range

Sublcoat
Sublcoat Backpainted
Subliclear
Sublibacklit
Sublilam

SubliClear is een hoogwaardige glasheldere film om full color afbeeldingen op glas aan te brengen voor buitentoepassingen. Subliclear is een zelfklevende hoogwaardige transparante folie waarin full color inkten zijn aangebracht, deze folie wordt naderhand voor of achter het glas aangebracht. De folie bestaat uit 2 UV blokkende lagen met daartussen een laag waarin de inkten zijn aangebracht.

De SubliClear kan zowel op het werk als in de productie worden aangebracht en kan op gelamineerd, ongehard of gehard glas worden aangebracht. In situaties waar men te maken heeft met zonlicht dient het glas gehard te zijn om thermische breuk te voorkomen.

Specificaties

Minimale glasdikte	4 mm
Maximale glasdikte	nvt (alle glasdikten mogelijk)
Minimale afmeting	nvt
Maximale lengte	3200 mm
Maximale breedte	1400 mm
Toepassingsgebied	Binnen, buiten
Toepassingen	Terrasschermen, reclame
Transparantie	Wel transparant, wel lichtdoorlatend, glashelder
Beeldmateriaal	300 dpi - 1:1, 5 mm overlap

Type glas

Subliclear kan toegepast worden op extra helder glas of "gewoon" floatglas. Bij extra helder glas is het groen uit het glas gehaald, het glas is ijzer arm gemaakt. Hiervoor geldt een meerprijs t.o.v. floatglas. Uiteraard zijn er ook andere glas/beeld samenstellingen te produceren, zoals matglas. Al het glas wordt gehard volgens CE normering, indien gewenst kan hiervan een logo tijdens het harden van het glas worden meegebakken.

Bijlagen

- Testresultaten Kiwajet
- Testrapporten fire resistancy

Subliclear

Toepassingen

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List of Physical Property of "KIWAJET" Dye Sublimation Media

2007.5.28

Test Item	Test Condition	Backlit			Trans			Reflective	White			Blackthrough	Remarks	
		Glossy type	Matt type	-	Glossy type	Matt type	Matt type	Glossy type	Glossy type	Matt type	-			
		Back-adhesive (low adhesive)	Front-adhesive (low adhesive)	Back-adhesive (permanent adhesive)	Back-adhesive (permanent adhesive)	Non-adhesive	Back-adhesive (low adhesive)	Back-adhesive (low adhesive)	Back-adhesive (permanent adhesive)	Back-adhesive (permanent adhesive)				
Thickness (μ)	Film	180	150		150		220	160	150		105	Dial gauge		
	Adhesive	33	33		33		—	43	33		20			
Adhesive Strength (N/inch)	72 hours after application on substrate	Stainless Steel Panel	10±2			20±3		—	10±2	20±3	7±1	Pulling speed: 200mm/min Peeling angle: 180° Sample width: 25mm Condition after application on substrate: 20±2°C, 65±5%RH		
		Aluminium Panel	7±2			20±3		—	7±2	20±3	9±1			
		ABS Panel	9±2			11±2		—	9±2	11±2	7±1			
		Acrylic Panel	8±2			20±3		—	8±2	20±3	6±1			
		Polycarbonate Panel	9±2			17±2		—	9±2	17±2	6±1			
Dimensional Stability	Shrinkage when image transferred (%)	160°C × 7min	MD	below +0.7	below +0.7	below +0.7	below +0.7	below +0.7	below +0.7	below +0.7	below +0.7	below +0.7	Substrate: Aluminium Panel Sample size: 100 × 100mm	
			TD	below +0.2	below +0.2	below +0.2	below +0.2	below +0.2	below +0.2	below +0.2	below +0.2	below +0.2		
	Shrinkage When media image transferred applied on substrate (%)	80°C × 48hours	MD	0	0	0	0	0	0	0	0	0		
			TD	0	0	0	0	0	0	0	0	0		
Water Resistance	23°C × 168hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	Substrate: Aluminium Panel		
Chemical Resistance	Salt Water (5%)	168hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	Immersion method	
	0.1N HCl	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	Observation of surface when each chemical 0.5cc dropped on and removed after 5 hours	
	0.1N NH4OH	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect		
	Ethanol	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect		
	Kerosene	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect		
	Gasoline	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect		
	Engine Oil	5hours	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect		
Resistance to Accelerated Weathering	Sunshine 1000 hours	∠E	Cyan	below 10	below 10	below 10	below 10	below 10	below 10	below 15	below 10	below 10	below 10	Black panel: 63±3°C Water spray: 18min/120min Ink: KIWA sublimation ink
			Yellow	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	
			Magenta	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	
			Black	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	
	Specular Gloss Retention (%)	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	JIS Z 8741 60° Specular Gloss	
Resistance to Outdoor Exposure	Exposure to South at 45° 1 year	∠E	Cyan	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	North Latitude: 34° 13' 28" East Longitude: 135° 19' 18"
			Yellow	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	below 5	
			Magenta	below 15	below 15	below 15	below 15	below 15	below 15	below 10	below 15	below 15	below 15	
			Black	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	below 10	
	Specular Gloss Retention (%)	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	over 90	JIS Z 8741 60° Specular Gloss	
Pencil Hardness	JIS K 5400	2H	2H	2H	2H	2H	2H	2H	2H	2H	2H	Judged by torn coating		

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007

Sponsor	Van Dijken Glas BV Coenecoop 67 NL-2741 PH WADDINXVEEN The Netherlands
Prepared by	Efectis Nederland BV Lange Kleiweg 5 P.O. Box 1090 NL-2280 CB RIJSWIJK The Netherlands
Notified Body no.	1234
Product name	Kiwajet Transvision Clearfilm with a permanent adhesive system, applied to a steel sheet
Classification report no	2010-Efectis-R0537
Issue number	1
Date of issue	May 2010
Project number	2010270

This classification report consists of five pages and may only be used in its entirety.

This report is issued by Efectis Nederland BV (previously TNO Centre for Fire Research). Efectis Nederland BV and her sister company Efectis France are full subsidiaries of Efectis Holding SAS since 1st January 2008, in which the Dutch TNO and the French CTICM participate. The activities of the TNO Centre for Fire Research were privatised in Efectis Nederland BV since 1st July 2006. This is in response to international developments and requests by customers. In order to be able to give a better answer to the customer's request and offer a more comprehensive service of high quality and a wider range of facilities, the international collaboration has been further expanded. This is done with highly experienced partners in fire safety in Norway (Sintef-NBL), Spain (Afiti-Licof), Germany (IFT), USA (South West Research Institute) and China (TFRI). Further information can be found at our website.

1. Introduction

This classification report defines the classification assigned to **Kiwajet Transvision Clearfilm** with a permanent adhesive system, applied to a steel sheet, in accordance with the procedures given in EN 13501-1:2007.

2. Details of classified product

2.1 General

The product, **Kiwajet Transvision Clearfilm** with a permanent adhesive system, applied to a steel sheet, will be applied to surfaces such as glass.

2.2 Product description

The product is made of:

- PET with a permanent adhesive system
- a thickness: film 150 μm ; adhesive 33 μm
- a sublimation film: through a transfer technique the sublimation inks are transferred in to the film. The ink is water based.

The product has a total thickness of approx. 183 μm and a mass per unit area of approx. 230 g/m^2 .

Detailed specifications are kept in the project file.

2.3 Manufacturer/Supplier

Manufacturer:

Kiwa-Chemicals, Japan

Supplier:

Big Picture Group, Japan

3. Test reports & test results in support of classification

3.1 Test reports

Name of Laboratories	Name of sponsor	Test reports	Test method
Efectis Nederland BV The Netherlands	Van Dijken Glas BV The Netherlands	2010-Efectis-R0535 2010-Efectis-R0536	EN ISO 11925-2:2002 EN 13823:2002

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA _{0,2MJ} [W/s]	3	26	-
	FIGRA _{0,4MJ} [W/s]		18	-
	THR _{600s} [MJ]		0.8	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		1.7	-
	TSP _{600s} [m ²]		44	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		-	Compliant Compliant
EN-ISO 11925-2				
surface flame impingement	Fs ≤150 mm	6	28	-
	Ignition of filter paper		-	Compliant
edge flame impingement	Fs ≤150 mm	6	30	-
	Ignition of filter paper		-	Compliant

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007

4.2 Classification

The product, **Kiwajet Transvision Clearfilm** with a permanent adhesive system, applied to a steel sheet, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: B - s1, d0

4.3 Field of application

This classification is valid for the following product parameters:

- Thickness approx. 183 μm
- Surface density approx. 230 g/m^2

This classification is valid for the following end use applications:


- Substrate steel sheet ≥ 1.2 mm - non-combustible (class A1/A2 according to EN 13501-1)
- Air gap 80 mm, free standing
- Methods and means of fixing with a permanent adhesive system
- Joints with vertical joints
- Other aspects of end use conditions to be applied to surfaces such as glass

4.4 Duration of the validity of this classification report

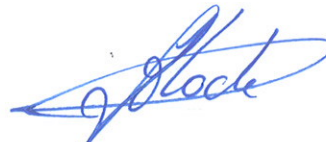
There are no limitations in time on the validity of this report.

5. Limitations

This classification document does not represent type approval or certification of the product.



C.C.M. Steinhage B.Sc.



A.J. Lock

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