

ROAD MARKING MATERIALS

(Durability against abrasion: UNE-EN 13197:2012+A1:2014)

CERTIFICATE OF DURABILITY TEST

REF. **3986/PE-RR-II**

Client: SWARCO VICAS
 Soseaua Gaesti 8
 130087 TARGOVISTE - Romania

Issue date: March 02nd, 2017



1.- TESTED ROAD MARKING SYSTEM

A) IDENTIFICATION

MATERIALS IDENTIFICATION, TRADE MARK NAME AND TYPE OF APPLICATION		MANUFACTURER(S)	Thickness (µm)	Dosage (g/m ²)
Nature:	White acrylic paint	SWARCO VICAS	600	930
Trade mark ¹ :	SWARCOMARK SV 210			
Applied by:	Spray	M. SWAROVSKI GmbH		450
Nature:	Glass beads and antiskid aggregates			
Trade mark ² :	SWARCOLUX 50 212-1400 T14 M20			
Applied by:	Drop-on			
TYPE OF MATERIAL: White acrylic paint without premix glass beads applied by spray and with a mixture of drop-on glass beads and antiskid aggregates.				
CHARACTERISTIC OF THE ROAD MARKING: (in accordance with UNE-EN 1436:2009+A1:2009)			Not structured	

- 1) The characteristics of identification of the material can be obtained from the own manufacturer or in this laboratory with his authorization.
- 2) The tested material is identified by its CE Declaration of Conformity and their accompanying documents.

B) TEST RESULTS: on roughness (in accordance with UNE-EN 13197:2012+A1:2014)

RG2

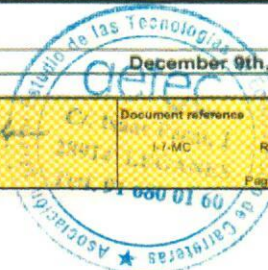
REQUIREMENTS OF THE ROAD MARKING SYSTEM in accordance with UNE-EN 1436:2009+A1:2009			DURABILITY expressed in TRAFFIC CLASSES, in accordance with UNE-EN 13197:2012+A1:2014					
According to the intended use of the road marking system, not all requirements are necessary			Expressed in	P0	P4	P5	P6	P7
Night-time visibility	Coefficient of retro reflected luminance R _L	dry	Class (R)	R4	R4	R4	R4	R4
		rain	Class (RR)	RR5	RR4	RR5	RR4	RR3
		wet	Class (RW)	RW6	RW6	RW6	RW6	RW5
Day-time visibility	Luminance coefficient in diffuse illumination Q _d		Class (Q)	Q5	Q5	Q5	Q5	Q5
		or luminance factor β	Class (B)	B5	B5	B5	B5	B5
		Chromaticity coordinates (x,y)	Pass / Not Pass	pass	pass	pass	pass	pass
Skid resistance	SRT units		Class (S)	S3	S3	S3	S3	S3
Wear	Percentage of wear (remaining road marking)		%	100	98	97	96	94
Type	Type road marking system		Type I / II	II				
NO PICKUP-TIME: In accordance with UNE-EN 13197:2012+A1:2014			Class (T)	T2				

Date of start of the test: **November 14th, 2016** Date of end the test: **December 9th, 2016**

CERTIFICATE OF DURABILITY TEST	Ref.	Issue date	Laboratory Manager	Document reference
This certificate is identical to the original spanish version.	3986/PE-RR-II	March 02nd, 2017	<i>[Signature]</i> D. Francisco J. Guerra	17-MC Rev. 0 Page 1 of 2

This CERTIFICATE cannot be partially reproduced without permission of AETEC S.A.

The validity status of the certificate can be confirmed in www.aetec.es



MATERIALE MARCAJ RUTIER

(Durabilitatea contra abraziunii : UNE-EN 13197:2012+A1:2014)

CERTIFICAT DE TEST DE DURABILITATE	REF.	3986/PE-RR-II
---	-------------	----------------------

Customer: SWARCO VICAS
Soseaua Gaesti 8
130087 TARGOVISTE – Romania

Data eliberarii : 02 martie 2017

1. SISTEM DE MARCAJ RUTIER TESTAT

A) IDENTIFICARE

IDENTIFICAREA MATERIALELOR, DENUMIREA MARCII DE COMERT SI TIPUL APLICATIEI		FABRICANTUL (S)	GROSIME (μm)	Dozare (g/m ²)
Felul Marca de comert Aplicat de	Vopsea acrilica, alba SWARCOMARK SV 210 Pulverizare	SWARCO VICAS	600	930
Felul Marca de comert Aplicat de	Perle de stical si agregate antiderapante SWARCOLUX 50 212-1400 T14 M20 Picurare	M. SWAROVSKI GmbH		450
TIPUL DE MATERIAL: Termoplastic, alb, cu perle de sticla preamestecare prin extrudare si cu un amestec de perle de sticla picurate si agregate antiderapante.				
CARACTEROISTICILE MARCAJULUI RUTIER: In conformitate cu UNE-EN 1436:2009 + A1:2009			Nestructurat	

1) Caracteristicile de identificare ale materialului pot fi obtinute de la producatorul sau sau in acest laborator cu autorizarea sa.

2) Materialul testat este identificat prin Declaratia de Conformitate CE si cu documentele insotitoare.

B) REZULTATELE TESTULUI : asupra rugozitatii (in conformitate cu UNE-EN 13197:2012 + A1;2014)

RG2

CERINTE PENTRU SISTEMUL DE MARCAJ RUTIER (conform UNE-EN 1436:2009 + A1:2009)			DURABILITATE exprimata in CLASE DE TRAFIC, conform UNE-EN 13107-2012 + A1:2014					
Conform utilizarii proiectate pentru sistemul de marcaj rutier, nu sunt necesare toate cerintele			Exprimat in	P0	P4	P5	P6	P7
Vizibilitatea pe timp de noapte	Coeficientul lu minantei retro reflectate R4	uscata	Clasa (R)	R4	R4	R4	R4	R4
		ploaie	Clasa (RR)	RR5	RR4	RR5	RR4	RR3
		umed	Clasa (RW)	RW6	RW6	RW6	RW6	RW5
Vizibilitatea pe timp uscat/seceta	Coeficientul de luminanta in iluminare difuza Qd sau factor de luminanta β Coordonatele cromatice (x,y)		Clasa (Q)	Q5	Q5	Q5	Q5	Q5
			Clasa (β)	B5	B5	B5	B5	B5
			Trece/Nu trece	trece	trece	trece	trece	trece
Rez. la alunecare	Unitati SRT	Clasa (S)	S3	S3	S3	S3	S3	
Uzura	Procent de uzura (marcaj rutier ramas)	%	100	98	97	96	94	
Tipul	Tipul sistemului de marcaj rutier	Tip I / II	II					
FARA TIMP DE PRELUARE: conf. UNE-EN 13197:2009+A1:2009			Clasa (T)	T2				

Data inceperii testului	14 noiembrie 2016	Data terminarii testului	9 decembrie 2016
-------------------------	-------------------	--------------------------	------------------

CERTIFICAT DE TEST DE DURABILITATE Acest certificat este identic versiunii originale spaniole	Ref.	Data eliberarii	Director Laborator, Semnatura indescifrabila Stampila rotunda legala a AETEC SA D.Franciaco J. Guarra	Referinta document
	3986/PE-RR-II	02 martie 2017		1-7 MC Rev.9 Pag. 1 din 2

Acest CERTIFICAT nu poate fi reprodus partial fara permisiunea AETEC S.A.
Situatia valabilitatii certificatului poate fi confirmata pe www.aetec.es

Manolescu Simona Elena
Traducător Autorizat
Engleză, Franceză
Autorizatie nr. 8446