

Bellaterra : 31th May, 2016
Report N° : 16/31702039
Petitioner's reference : **MARIS POLYMERS S.A.**
Industrial Area of Inofita
32011- INOFITA(GREECE)

TEST REPORT

MATERIAL RECEIVED

Sample of the sheet is received on 07th March, 2016, referenced by the Petitioner as:

DESCRIPTION	REFERENCE
<i>Liquid- applied polyurethane waterproofing membrane, two components.</i>	MARISEAL 600

Remarks: The sampling of the material received was performed by the petitioner

TESTS REQUESTED BY THE PETITIONER

- *Geosynthetic barriers. Test method for determining the resistance to roots according to Standard s/n CEN/TS 14416 EX: 2014.*

DATE OF TESTS PERFORMANCE: From 09.03.16 to 30.05.16

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This document has 3 pages, of which – are annexes, being this 1.

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PROCEDURES AND RESULTS

DETERMINATION THE RESISTANCE TO ROOTS

Test method according to standard CEN/TS 14416 EX: 2014.

- *Geosynthetic barriers. Test method for determining the resistance to roots*

Test conditions:

- Test specimen: Circular approx. 20 cm diameter.
- Number of test specimens: 3
- Test period: 8 weeks
- Seeds: Lupinus Albus.

Note: To ensure rapid growth of plants, seeds were germinated before being planted

Test Procedure:

According to the indications of the standard, emptying and inspection after 8 weeks according to section 5 CEN/TS 14416 EX:2014 and prior verification that the roots penetrated the sample of bitumen.

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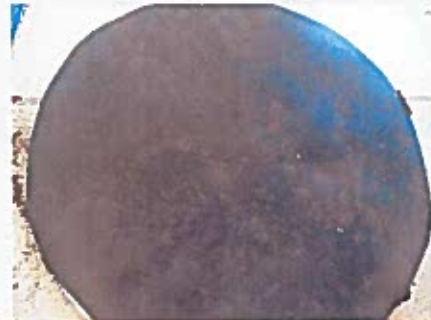
Results:

After the test, upper and lower surface of the test sheet are inspected.
No roots penetration into or through of the sheet is observed in either of the 3 test specimens.

Upper surface of the test specimen MARISEAL 600



Lower surface of the test specimen MARISEAL 600



Firmado digitalmente

Por Marina Curto Diego

Marina Curto Diego
IPE Technical Manager
Materials & Process

LGAI Technological Center S.A

The results refer exclusively to the sample, product or materials delivered to the laboratory, as indicated in the section pertaining to the description of the material received, and tested under the conditions stated in this test report.

Applus+ guarantees that this task has been carried out in compliance with the requirements of our Quality and Sustainability System, and furthermore, that the contractual terms and legal regulations have been complied with.

In the framework of our Improvement programme, we would appreciate any comments you may deem appropriate. These should be addressed to the manager who signs this document, or to the Quality Director of Applus+ at the following address: satisfaccion.cliente@applus.com.

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Nº Fax: 16/31702039



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3. Anexos

HOJA DE PETICIÓN DE SERVICIOS.

Para facilitar la realización de su pedido, puede venir por fax esta petición y nosotros empezaremos a trabajar para usted. Si desea elector una aceptación parcial del presupuesto sólo es necesario que indique que servicios necesita. No dude en agregar cualquier información que crea necesaria para la realización del servicio.

Sirva este fax como aceptación de la oferta en las condiciones expresadas.

OFERTA Nº: 2016_5810211090_MCD_210

Persona de contacto en APPLUS: Marina Curto Diego

(Actividad de IPE)

Número de fax:

93.567.20.01

Sirva este fax como aceptación provisional de la oferta en las condiciones expresadas hasta la recepción de su pedido oficial.

En caso de que su empresa no genere documento de pedido oficial, marque con una X:



Número de referencia de su pedido: 2016_5810211090_MCD_210

DATOS FISCALES:

Empresa:	MARIS POLYMERS S.A.	CIIF: EL 779528243
Dirección (*):	INDUSTRIAL MARA OF ENOFITA 32011 - INOEFITA (GREECE)	
IMPORTANTE: Forma de Pago y Cuenta Bancaria	100% pago por adelantado mediante transferencia bancaria	
Persona de contacto	ELIAS KALAMPALIKIS	
Teléfono:	0030 2262032918	Fax: E-mail kalampalikis@marispolymers.gr

(*): Dirección fiscal. (En el caso que la entrega de informes y facturas sea en direcciones distintas, rogamos lo especifiquen en el apartado de comentarios adicionales).

DATOS PARA LA REDACCIÓN DEL INFORME TÉCNICO.

Denominación del producto:

- MARISEAL 600: Liquid-applied polyurethane water proofing membrane, three component
- MARISEAL 670: Liquid-applied polyurethane water proofing membrane, one component

Ensayos a realizar:

Método de ensayo para la determinación de la resistencia a la perforación por raíces. UNE-CEN/TS 14416:2012 IN

Importe (€): 1.326,00

IDIOMA DEL INFORME:

Español Catalán Inglés

COMENTARIOS ADICIONALES:

CURB a 2 de MARZO de 2016 Firma y sello de la empresa solicitante

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