

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>	<i>MARISEAL 600</i>

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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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.

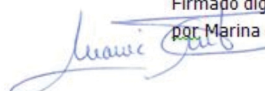
Upper surface of the test specimen MARISEAL 600



Lower surface of the test specimen MARISEAL 600



Firmado digitalmente
por Marina Curto Diego



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.

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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.