
Technical Service Report No. 40050

PNZ-Produkte GmbH, Kipfenberg



Samples of September 10nd, 2012

1. PNZ Dauerschutzlasur eiche gold without IPBC
2. PNZ Dauerschutzlasur plus eiche gold with IPBC

Objectives

- Sterility Test
- Fungicidal and Algicidal Film Preservation
- Analytical examination

Examinations

Sterility Test

Immediately upon receipt the sterility of the samples was checked by using Thor Test Method D 700.

Fungicidal Film Preservation

The samples are applicated on a suitable carrier material, inoculated with relevant fungal species and subsequently the fungal growth was observed on the sample surface.

The test was carried out acc. to Thor Test Method D 800.

Algicidal Film Preservation

The samples are applicated on a suitable carrier material, inoculated with relevant algal species and subsequently the algal growth is observed on the sample surface.

The test was carried out acc. to Thor Test Method D 850.

Results

Sterility Test

Immediately upon receipt the samples were free of viable micro-organisms.

The sample was subjected to the fungicidal and algicidal film preservation.

Fungicidal Film Preservation

The sample "PNZ Dauerschutzlasur eiche gold without IPBC" showed after water irrigation surface growth to 25 % up 75 %.

Sample "PNZ Dauerschutzlasur plus eiche gold with IPBC" was free of growth.

Algicidal Film Preservation

The sample "PNZ Dauerschutzlasur eiche gold without IPBC" showed after water irrigation heavy algae growth.

Sample "PNZ Dauerschutzlasur plus eiche gold with IPBC" was free of algae growth.

Analytical examination

Both samples were analysed regarding their active ingredient contents.

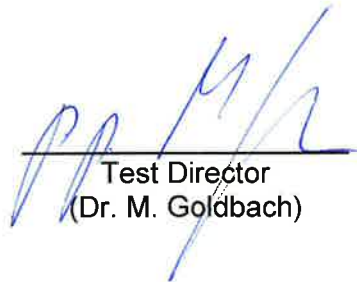
The determined values are enclosed in tabular form.

Detailed results of the single samples are listed in the enclosed tables.

Control of Technical Service Report

The tests in this report have been carried out according to the actual Thor Standard Test Methods. All results were verified by the responsible Technician and The Test Director with regard to correctness and completeness.

24.01.2013-BAR



Test Director
(Dr. M. Goldbach)



Technician
(D. Krapp/dn)

Please note that unless otherwise stated, the conclusions and any recommendations, either made or implied, are based on information drawn from examination of the samples identified in this report only. Since these may be influenced by, for example, infection level variations in raw materials, stored component solutions and manufacturing equipment, it is recommended that some appropriate monitoring of microbiological properties be carried out.

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Use biocides safely. Always read the label and product information before use.

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Results Sterility Test (Thor Test Method D 700)

Designation of sample	Bacteria	Yeasts ²⁾	Mould Fungi ²⁾
	aerobic ¹⁾		
1. PNZ Dauerschutzlasur eiche gold without IPBC	0	0	0
2. PNZ Dauerschutzlasur plus eiche gold with IPBC	0	0	0

° bacterial growth only on Sabouraud-Agar

* spore-forming bacteria

** amongst others spore-forming bacteria

¹⁾ Nutrient agar acc.TVO, 30° C, 48h

²⁾ Sabouraud-Agar, 25° C, 72h



Results Fungicidal and Algicidal Film Preservation
(Thor Test Methods D 800.2 & D 850.2)

Designation of sample	Fungal growth		Algal growth	
	0d	2d	0d	2d
1. PNZ Dauerschutzlasur eiche gold without IPBC	1	2	1	3
2. PNZ Dauerschutzlasur plus eiche gold with IPBC	0	0	0	0

0d = without water irrigation

2d = 2 days water irrigated



Analytical examination ¹⁾

Designation of sample	Ingredient [ppm]
	IPBC
1. PNZ Dauerschutzlasur eiche gold without IPBC	n.d.
2. PNZ Dauerschutzlasur plus eiche gold with IPBC	5000

¹⁾ results were ascertained in single determinations

Abbreviations:

n.d. not detected

IPBC Iodinepropinylbutylcarbamate

