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Dresden, August 28th, 2017 50-Fia

Test Report Order no. 2517319-A1

Client:

Kastamonu Entegre Ağaç San. Tic. A.Ş. Kömürcüoğlu Cad. 4512 Sokak No:6 41400 Gebze, Kocaeli Turkey

Date of order: Order: Contractor: Engineer in charge: July 10th, 2017 Determination of the contents of PCP, Lindane and tin EPH – Laboratory Chemical Testing Dr. Andreas Fischer

Prof. Dr. habil. M. Beyer Head of laboratory Chemical testing

The test report contains 3 pages. Any duplication, even in part, requires written permission of EPH. These test results are exclusively related to the tested material. This test report replaces report 2517319 dated August 14th, 2017.

Managing Director: Dr.-Ing. Rico Emmler Dresden Local Court HRB 8072 VAT Reg.No. DE 21 60 77 44 6 Commerzbank AG SWIFT: DRES DE FF 850 IBAN: DE 13 8508 0000 0400 2982 00





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1 Task and Sample description

On July 10th, 2017, the Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH) received the order to carry out the following analysis on 2 samples:

| Receipt of the sample: | July 21 st , 2017 |
|------------------------|----------------------------------|
| Amount of sample: | 3x PB (200 mm x 200 mm x 10 mm) |
| | 3x MDF (200 mm x 200 mm x 18 mm) |

The PB-sample was to be analysed in regard to PCP and the MDF-sample in regard to PCP / Lindane and overall tin content. If the tin amount is higher than a certain level, a further analysis of tin organic substances would be carried out.

2 Sample preparation and analysis

Determination of fungicides

The sample was cut to a particle size of less than 1 mm and mixed for the respective sample. 2 g were weighed exactly. For extraction 40 mL toluene and 2 mL 1 M sulfuric acid were added, followed by a 3 h sonication and further shaking for 16 hours. A part of the solution was filtrated, derivatised with acetic anhydride and the PCP was measured with a gas chromatograph using ECD-detection (GC-ECD). Lindane was measured with GC-ECD in another part of each extract. External calibration was performed with calibration standards from commercial sources.

Determination limits for PCP and Lindane (2 g of sample): 0.05 mg/kg

Determination of tin

The sample was dried in a cabinet drier at 105° C until the constant mass was reached. Then, 500 mg of the sample was given into a microwave digestion vessel together with 5 mL concentrated nitric acid and 1 mL H₂O₂. The microwave digestion was executed according to the temperature regime prescribed in AA EPH-50-26. Then, the solution was transferred into 50 mL graduated flask and filled up to the mark. The content of tin was determined by inductively-coupled plasma atomic emission spectrometry (ICP) in compliance with CPSC-CH-E1003-09.1 and ASTM-E1613-04. The test result is the average value of a double determination.

 Determination limit for tin:
 0.1 mg/kg.

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 Results and evaluation

 PCP / Lindane content:
 PCP in 10 mm PB PCP / Lindane in 18 mm MDF
 not determinable not determinable

 Tin content:
 in 18 mm MDF
 not determinable

In the tested samples neither PCP nor Lindane was determinable. In the tested MDF tin was not determinable.

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4 Miscellaneous

Remaining sample will be stored as a control sample for 3 months in the EPH.

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Dr. Andreas Fischer Chemist in charge