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Cabrero - Chile

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Dresden, 25 May 2016

Regular TPC Supervision Report No. 02-2016
Order no. 258184

Client: Masisa S.A. Chile
Planta Cabrero
Division Tableros, Ruta Q-50, Casilla. 17
Cabrero - Chile

Date of order: 05 April 2016

Inducement: Third Party Supervision and Certification Agreement MDF-08-11-11-01/ MDF-08-11-11-02

Order: Regular supervision within the supervision contract MDF-08-11-11-01/ MDF-08-11-11-02 including the Factory Production Control (FPC) and the determination of the formaldehyde release of fibre boards and particle boards according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations by the Third Party Certifier

Contractor: Entwicklungs- und Prüflabor Holztechnologie GmbH
Zellescher Weg 24, 01217 Dresden, Germany

Person in Charge TPC: Dipl.-Chem. Christiane Ostaar



Dr.-Ing. Rico Emmler
Head of the Third Party Certifier

The supervision report contains 4 pages and 1 annex. Any duplication, even in part, requires written permission of EPH. These test results are exclusively related to the tested material.

1 Assignment

Within the Third Party Supervision and Certification Agreement MDF-08-11-11-01/MDF-08-11-11-02 the TPC the Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH) was instructed by MASISA S.A. CHILE, PLANTA CABRERO with the regular supervision of the FPC as well as to determine the formaldehyde release of fibre boards and particle boards according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations.

2 Sampling

The boards MDF Light/Ultra-Light were taken by the responsible person of the TPC under co-operation of the persons in charge for the FPC on 05 April 2016. MDF Thin was taken by the responsible persons in charge for the FPC on 11 April 2016. The samples for testing were up to 3 days old and randomly selected from one single batch which was ready for shipping.

The samples were labeled immediately after sampling, wrapped airtight into foil and sent to the chemical testing laboratory of the TPC.

On 18 April 2016, the samples arrived at the EPH wrapped airtight in foil.

Concerned are the following control samples:

Product	Type	Dimension of board [mm] / Lot-Number	Thickness [mm]	EPH-Code	Production date
1/2	Fibre board MDF Light/ Ultra-Light 9 - 30 mm	1220 x 2440 5I40822293	15	F-MDF-1/2-R2-1/1...4-16-04-05 F-MDF-1/2-R2-2/1...4-16-04-05 ^{*)}	2016-04-03
3	Fibre board MDF Thin 2.7 - 7 mm	2470 x 6150 5H30116156	5.5	F-MDF-3-R2-1/1...4-16-04-05 F-MDF-3-R2-2/1...4-16-04-05 ^{*)}	2016-04-08

^{*)} reserve set

3 Audit of the FPC

The FPC was audited on 05 April 2016.

Audit participants:

Masisa S.A. Chile; Cabrero

Mr. Jose Muñoz, Quality Assurance Coordinator

Mr. Macarena Munoz, Laboratory Technician GP

Mrs. Marcela Quiroz, Laboratory Technician GP

TPC – EPH

Mr. Prof. Hernan Poblete, EPH inspector

Audit results

Within the audit the questionnaire according to the California Code of Regulations § 93120 were reviewed. The quality control manual (Version 9 ISO 9001 2013 dated July 21, 2014) was submitted.

The laboratory facilities and equipment of Georgia Pacific are in proper condition and calibrated.

In the result of the production plant audit it can be stated that the personnel and equipment conditions for a constant correct production are given and that quality and the testing frequency at the manufacturer meet the requirements. In the self-monitoring method, the formaldehyde content is determined according to the perforator method EN ISO 12460-5.

The quality assurance is in compliance with regulations according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products"; sections 93120 - 93120.12, title 17, California Code of Regulations.

The audit minutes were handed over to the manufacturer.

Findings

No non-complying lots were produced during the last supervision period.

4 Product testing by the chemical testing laboratory of the TPC

4.1 Investigations carried out

The determination of the formaldehyde release according to the test chamber method ASTM D 6007 of the samples were carried out in the period from 05 May 2016 to 19 May 2016.

In addition the determination of the formaldehyde content according to the perforator method DIN EN ISO 12460-5¹ took place on 18 May 2016 (see test report 258184/R2-2016 dated 25 May 2016).

4.2 Assessment and Evaluation

Product	Type	Formaldehyde release ASTM D 6007 [ppm]	CARB Phase 2 compliant ²	Formaldehyde content acc. EN ISO 12460-5 [mg/100 g atro bd.]
1/2	MDF Light/ Ultra-Light	0.11	YES	7.3
3	MDF Thin	0.09	YES	6.3

The tested product types MDF Thin and MDF meet the limit values for fibre boards following the CARB regulations Phase 2 regarding the formaldehyde emission and fulfil the requirements according to the California Code of Regulation, title 17, § 93120.2 (a).

5 Obligations

No obligations.

¹ May 2016: EN 120 has been superseded by new Standard ISO 12460-5 approved by the International Organization for Standardization <http://www.arb.ca.gov/toxics/compwood/outreach/iso.pdf>

² CARB P2 limit values acc. to FRO §93120-93120.12, title 17, California code of Regulations: MDF Thin: 0.13 ppm
MDF: 0.11 ppm

6 Summary

The products MDF Light/ Ultra-Light and MDF Thin meet the requirements of the certification according to the Third Party Supervision and Certification Agreement MDF-08-11-11-01/ MDF-08-11-11-02.

The Third Party Certifier confirms the certification in the framework of the supervision contract.

7 Next supervision period

Date: III. Quarter 2016

Dresden, 25 May 2016



Dipl.-Chem. C. Osthaar
Person in Charge TPC