#### **PFS TECO Oregon Laboratory**

5250 Highbanks Road, Suite 200 Springfield, OR 97478 USA Phone 541-636-4687

www.pfsteco.com



# ASTM D6007 - 14 Test Report

# Client

## Report # 17-SC-792

Purpose: Testing contracted by client for its own purposes

Weyerhaeuser WTC 1K5 32901 Weyerhaeuser Way S. Federal Way, WA 98001

# **Product Information**

Description:	Sample B (Flak Jacket with Grey (W20115) Field Paint	Sampling by:	Client
Surface Treatment:	Coated	Packaging:	Wrapped in Plastic
Thickness:	16 mm (measured thickness)	PFS TECO Specimen Code:	N/A
Specimen size (received):	24 x 6 in.	Batch/Lot Number:	N/A
Number of specimens:	3	Date manufactured:	N/A
		Date sampled:	N/A

# **Summary of Results**

Testing	sting Conducted By: PFS TECO					
	5	250 Highbanks Road, Suite 200				
	S	Springfield, OR 97478 USA				
Dates:	Received on: 17 July 20	ly 2017				
	Tested on: 25 July 2017	.017				
Background test results:		Conditioning room: < 0.01 ppm				
	Conditioning roo	m: Air in the chamber: $< 0.01$ ppm				
Formaldehyde emission result:		Calculated	<b>Final Reported</b>			
		0.010 ppm	0.01 ppm			

Stage	Start Date	Start Time	End Date	End Time	Tempera	ature (°C)	Relative Hun	nidity (%)
Background	24 July 2017	8.16	24 July 2017	0.16	Average	24.9	Average	49.4
Test-Room	24 July 2017	0.10	24 July 2017	9.10	Range	24.7-25.1	Range	48.0-49.6
Background	24 July 2017	9.10	24 July 2017	0.12	Average	25.4	Average	50.3
Test-Chamber	24 July 2017	0.12	24 July 2017	9:12	Range	25.3-25.4	Range	49.5-50.8
Conditioning	17 July 2017	15:30	24 July 2017	15:30	Average	24.5	Average	51.7
					Range	23.4-25.3	Range	42.7-58.7
Emission Test	25 July 2017	8:00	25 July 2017	9:00	Average	25.5	Average	50.0
					Range	25.4-25.6	Range	49.6-50.3

#### **Summary of Environmental Conditions and Sampling**

#### **Specimen Details and Apparatus**

Size of test specimen	114.8 x 114.8 mm	Edge treatment	Sealed with aluminum tape
Number of specimens	3	Number of exposed surfaces	6
Total exposed area	791 cm <sup>2</sup>		
Chamber Size	61 x 61 x 41 cm (24 x 24 x 16 in)	Chamber volume	0.151 m <sup>3</sup>
Makeup air flow rate (nominal)	2.5 L/min	Q/A ratio (nominal) <sup>a</sup>	1.905 m/h
Sampling Time	60 min	Actual volume of air sampled	59.9 L

<sup>a</sup> At the client's direction, the Q/A ratio for MDF was used.

#### **Deviations**

Testing for this project followed the guidelines of ASTM D6007, with the following permitted deviations from the published method:

- 1. Increased conditioning and sampling time (7 days conditioning and 60 minutes sampling);
- 2. A single emission test was conducted after the specimen was held in the small chamber for at least 16 hours (as in ASTM E1333 protocol) instead of determining steady state emission in section 10.1.4 of the standard.
- 3. The end of Conditioning Time (reported above) is the time that the specimens were loaded into the small chamber and they conditioned in the small chamber until the beginning of the emission test.
- 4. Use of the acetylacetone method of analysis (at 412nm) presented in the Japanese Industrial Standard JIS A1460 instead of the NIOSH 3500 chromotropic acid method presented in the ASTM standard.

**Prepared by:** 

Zhaozhen Bao, PhD Senior Scientist 25 July 2017

Approved by:

t.a

Steven A. Verhey, Ph.D. VP – Panel Products, Laboratories 25 July 2017