

**TEST REPORT**

**288834 / 1**

Revision: 0  
Date received: 25/03/20  
Date of test: 04/05/20  
Date of issue: 24/06/20



ORMA ORMAN MAHSULLERI INTEGRÉ SANAYI  
VE TIC. A.S.  
SANAYI MAHALLESİ 104. CADDE NO:91  
32310 ISPARTA  
TR - TURKEY

Sample name: Melamine faced particle board production date 13/03/2020

**Determination of emissions into indoor air - UNI EN 16516:2018**

**SAMPLE DESCRIPTION**

Type of product	Coated particleboard
Sampling performed by	Client
Declared production date	13/03/2020
Date and time of unpacking	04 May 2020 h. 16:30

**EXPERIMENTAL CONDITIONS**

Chamber n.	909	Volume	0,25 m <sup>3</sup>
Temperature	23±1°C	Relative humidity	50±5%
Air change rate	0,5/h	Air velocity	0,2±0,1 m/s
Test specimen area	0,25 m <sup>2</sup>	Loading ratio	1,0 m <sup>2</sup> /m <sup>3</sup>

Adsorption material	Tenax TA		
1st Air sampling	07 May 2020 h. 16:23	Air sampling duration	50 min
Air sampling flow	0,080 l/min	Air volume	4,0 litres
2nd Air sampling	01 Jun 21020	Air sampling duration	50 min
Air sampling flow	0,080 l/min	Air volume	4,0 litres

Thermal desorber	Perkin Elmer Turbomatrix 16
Gaschromatograph	Perkin Elmer Clarus 500 GC
Mass spectrometer	Perkin Elmer Clarus 500 MS

Quantification: Internal standard - Calibration curve at 5 concentrations (linear regression)

LOD (Limit of Detection) = 1 µg/m<sup>3</sup>

LOQ (Limit of Quantification) = 2 µg/m<sup>3</sup>

*This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.*

Managing Director  
Dr. Andrea Glavon

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Date of issue:

24/06/20

Sample name:

Melamine faced particle board production date 13/03/2020

**COMPANY** ORMA ORMAN MAHSULLERI INTEGRE SANAYI VE TIC. A.S. - Isparta (Turkey)

**DATE OF THE TEST** 04 May 2020

VOLATILE ORGANIC COMPOUNDS	C. A. S. NUMBER	EMISSION FACTOR ( $\mu\text{g}/\text{m}^2\cdot\text{h}$ )		CONCENTRATION ( $\mu\text{g}/\text{m}^3$ )		LCI 08/2018
		after 72 hours \$	after 28 days \$	after 72 hours #	after 28 days #	
Formaldehyde * £	50-00-0	n. d.	8	n. d.	16	100
Acetaldehyde * £	75-07-0	n. d.	12	n. d.	24	1200
Acetone * £	67-64-1	n. d.	46	n. d.	92	1200
alpha Pinene (a)	80-56-8	80	60	160	120	2500
Other monoterpenes (c)	---	32	< 3	64	40	---
Pentanal (a)	110-62-3	5	5	10	9	800
Hexanal (a)	66-25-1	27	26	53	51	900
Nonanal (a)	124-19-6	3	3	6	6	900
Hexanoic acid (a)	142-62-1	4	6	8	11	2100
Not identified compounds (c)	---	5	6	9	11	---
Acetic acid (a)	64-19-7	10	6	20	12	1200
Carcinogenic VOC (1A e 1B)				< 1	< 1	
TVOC (toluene equivalent)				200	180	
Total reference compounds				250	200	
Total not reference and not identified compounds				73	51	
Total VOC				320	250	
TSVOC (toluene equivalent)				< 5	< 5	
R				--	0,39	

**NOTES:**

# duplicate test

\$ calculated value

\* method with Dinitrophenylhydrazine and HPLC (ISO 1600-3:2011)

(a) reference compounds

(b) not reference compounds quantified as toluene

(c) not identified compounds quantified as toluene

£ VVOC

n. d. not determined after 72 hours