



INSTYTUT TECHNOLOGII DREWNA

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Jednostka Notyfikowana Nr 1583



AB 088

WOOD, WOOD-BASED MATERIALS, PACKAGING, FURNITURE, WOODEN CONSTRUCTIONS AND WORKING MACHINES TESTING LABORATORY



INFLAMMABILITY TESTING SECTION

Poznań, 21st February 2017

TEST REPORT No. 249/2017/S.K

Subject of the order Ignitability test of compact seat of Mamu chairs according to PN-EN 1021-1 and PN-EN 1021-2

Order No A-249-BOŚ/2017

**Name and address
of the client/manufacturer
producer**

NOTI Sp. z o.o.
ul. Sowia 19
62-080 Tarnowo Podgórne

Performance date 23.01. – 21.02.2017

Operators

First name and surname	Signature
Urszula Matelska	<i>U. Matelska</i>

Laboratory stamp

Authorised representative

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KIEROWNIK
Sekcji Badań Palności
Hanna Wróblewska
dr Hanna Wróblewska, prof. ITD.

1. IDENTIFICATION (DESCRIPTION OF TEST SAMPLES)

The subject of tests: three dimensional shell-shaped seat of Mamu chairs

Tested upholstery assembly:

cover material): without upholstery fabric

upholstery filling: felt of polyester fibers

Identification number: A-249-BOŚ/2017/SK.

2. DELIVERY DATE OF TESTED SUBJECT

Representative samples for tests taken by the Client were delivered to the Wood Technology Institute on 23rd January 2017.

3. SYMBOLS AND NAMES OF TEST METHODS APPLIED

Tests were carried out based on the standardized methods according to:

- PN-EN 1021-1:2014-12 FURNITURE – ASSESSMENT OF THE IGNITABILITY OF UPHOLSTERED FURNITURE – PART 1: IGNITION SOURCE: SMOULDERING CIGARETTE (Method 1K)
- PN-EN 1021-2:2014-12 FURNITURE – ASSESSMENT OF THE IGNITABILITY OF UPHOLSTERED FURNITURE – PART 2: IGNITION SOURCE: MATCH FLAME EQUIVALENT (Method 2K)
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4. EQUIPMENT OF THE TEST STANDS (elementary)

Mass determination stand K1:

- Analytical balance K1/1
- Laboratory balance K1/11

Upholstery assembly ignitability tests preparation stand K3:

- Equipment for water soaking and drying of upholstery covering fabric and for preparation of upholstery assembly

Ignitability test stand K2:

- Test chamber with fume cupboard
- Metal test rigs of standardized dimensions
- Thermo anemometer K4/14
- Thermometer K2/12
- Mechanical stopwatch K2/5
- Electronic stopwatch K2/44
- Standardized cigarettes
- Standardized burner – Match flame equivalent

5. TEST RESULTS

Test results are presented in the records no. 1/249/2017/S.K and 2/249/2017/S.K.

6. STATEMENT

Test results presented in the record relate only to the tested samples.

The test report cannot be copied in parts, only in its entirety.

RECORD No. 1/249/2017/S.K
ASSESSMENT OF IGNITABILITY OF SEAT OF MAMU CHAIRS
Ignition source: smouldering cigarette
in accordance with PN-EN 1021-1:2014-12

Order No.: **A-249-BOŚ/2017** Date of test: 26.01.2017
Sample name: three dimensional shell-shaped seat of Mamu chairs
Client: NOTI Sp. z o.o., ul. Sowia 19, 62-080 Tarnowo Podgórne
Date: 23.01 – 21.02.2017

Tested materials – test assembly:
Cover material: without upholstery fabric
Upholstery filling: seat and back– felt of polyester fibers

The water soaking procedure of cover material according to PN-EN 1021-1 was/was not-carried out, because test assembly was without upholstery fabric

Test results: NON-IGNITION

Test	Cigarette			Comments
	1	2	3	
<u>Smouldering criteria</u>				Cigarettes No. 1, 2 and 3 were placed on the border between the seat and the backrest. Cigarettes 1 and 2 went out after non complete combustion – after 7'42'' (1) and after 11'56'' (2), without causing ignition. Cigarettes No. 3 went out after complete combustion – after 20'3'' without causing ignition. At the point of contact with the cigarettes (1, 2 and 3) surface of seat was melted. Dimensions of damages: Length: 25-73 mm Width: 11-15 mm Depth: 3 mm
Unsafe escalating combustion	NO	NO	NO	
Test assembly consumed	NO	NO	NO	
Smoulders to extremities	NO	NO	NO	
Smoulders through thickness	NO	NO	NO	
Smoulders more than 1 hour	NO	NO	NO	
In final examination, presence of active smouldering	NO	NO	NO	
<u>Flaming criteria</u>				
Occurrence of flames	NO	NO	NO	

Enter YES if criteria were exceeded or NO if criteria were not exceeded.

Signed: Urszula Matelska *U. Matelska* Date: Poznań, 26.01.2017

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test; they are not intended as a means of assessing the full potential fire hazard of the materials in use.

RECORD No. 2/249/2017/S.K
ASSESSMENT OF IGNITABILITY OF SEAT OF MAMU CHAIRS
Ignition source: match flame equivalent
in accordance with PN-EN 1021-2:2014-12

Order No.: A-249-BOŚ/2017			Date of test: 26.01.2017	
Sample name: three dimensional shell-shaped seat of Mamu chairs				
Client: NOTI Sp. z o.o., ul. Sowia 19, 62-080 Tarnowo Podgórne				
Date: 23.01 – 21.02.2017				
Tested materials – test assembly: Cover material: without upholstery fabric Upholstery filling: seat and back– felt of polyester fibers				
The water soaking procedure of cover material according to PN-EN 1021-1 was/was not-carried out, because test assembly was without upholstery fabric				
Wyniki badania: NON-IGNITION				
Badanie	Zapałka			Uwagi
	1	2	3	
Smouldering criteria				In the study 1, 2 and 3 equivalent of a match flame were applied on the border between the seat and the backrest for 15 s. The flame of the burner did not cause the ignition of Mamu seat.
Unsafe escalating combustion	NO	NO	NO	
Test assembly consumed	NO	NO	NO	
Smoulders to extremities	NO	NO	NO	
Smoulders through thickness	NO	NO	NO	
Smoulders more than 1 hour	NO	NO	NO	At the point of contact with the equivalent of a match flame the surface of seat was melted.
In final examination, presence of active smouldering	NO	NO	NO	
Flaming criteria				Dimensions of damages: Length: 25 -35 mm Width: 14 -16 mm Depth: 3 mm
Unsafe escalating combustion	NO	NO	NO	
Test assembly consumed	NO	NO	NO	
Flames to extremities	NO	NO	NO	
Flames through thickness	NO	NO	NO	
Flames longer than 120 s	NO	NO	NO	
Enter YES if criteria were exceeded or NO if criteria not exceeded.				
Signed:		Urszula Matelska		Date: Poznań, 26.01.2017
	 <i>M. Matelska</i>		
The above test results relate only to the ignitability of the combination of materials under the particular conditions of test; they are not intended as a means of assessing the full potential fire hazard of the materials in use.				

END OF THE TEST REPORT