

TEST REPORT

Customer: Flex2000 - Produtos Flexíveis, S.A

Address: Zona Industrial de Ovar – Fase III
Eng.º Ferreira Dias, s/n
3880 - 327 Ovar

Request: Fire Reaction Classification According French Standards

Material: Polyurethane Foam 25 FR

Request Reference: Email

Request Date: 2015-01-14

Material Reception Date: 2015-01-16

Test Date: 2015-01-26 e 2015-01-27

Report Nr: 01/LFF/15i

Determination of Fire Reaction Classification

1 - Scope

The tests reported concern the determination of the fire reaction class for a polyurethane foam produced by Flex2000 with reference **25 FR**, to be used on upholstery furniture, acoustic engineering and padding.

2 - Methodology

The tests were performed as indicated in the NF P 92-504 (flame persistence test) and NF P 92-505 (dripping test) issued on December 1995. The classification method was applied according to the standard NP P 92-507 of February 2004

3 - Specimens

The specimens were prepared by the customer and had the following dimensions:

Specimen	Length (mm)	Width (mm)	Thickness (mm)	Mass (g)
01/LFF/15i/01	460	230	20.55	54.4
01/LFF/15i/02	460	230	20.13	53.1
01/LFF/15i/03	460	230	19.43	51.0
01/LFF/15i/04	460	230	19.50	51.1
01/LFF/15i/05	71	71	20.20	2.5
01/LFF/15i/06	71	71	22.23	2.5
01/LFF/15i/07	71	71	20.66	2.6
01/LFF/15i/08	71	71	20.76	2.6

Before being tested the specimens were conditioned for a period of 241 hours at 23 ± 2 °C and 50 ± 5 % relative humidity.

4 - Results and classification

The tests performed on the flame persistence test (NF P 92-504) produced the following results:

Specimen	01/LFF/15i/01	01/LFF/15i/02	01/LFF/15i/03	01/LFF/15i/04
Time of igniter actuation	Burning time (s)	Burning time (s)	Burning time (s)	Burning time (s)
	0.2	0.4	0.1	0.3
	0.3	0.1	0.3	0.1
	0.2	0.5	0.2	0.4
	0.3	0.4	0.4	0.2
	0.4	0.2	0.2	0.2
	0.3	0.3	0.1	0.3
	0.3	0.3	0.4	0.4
	0.2	0.3	0.2	0.3

The tests performed on the flame dripping test (NF P 92-505) produced the following results:

Specimen		01/LFF/15i/05			01/LFF/15i/06			01/LFF/15i/07			01/LFF/15i/08		
Time of igniter actuation (s)		B	E	D	B	E	D	B	E	D	B	E	D
		44	83	39	42	75	33	47	79	32	43	77	34
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		---	---	---	---	---	---	---	---	---	---	---	---
Dripping	Inflamed	No			No			No			No		
	Not inflamed	Yes			Yes			Yes			Yes		
Cotton Inflammation		No			No			No			No		

B - Beginning of inflammation; E - End of inflammation; D - Burning Time

In view of whole results the material must be classified as **M1**.

5 - Complementary observations

During the accomplishment of the tests it was observed abundant release of gray smoke.

Porto, January 27, 2015

Responsible for testing



João Rodrigues

Technical Director of the Laboratory

