

TEST REPORT

Requester: TISSAGES & ENDUCTION SERGE FERRARI Zone industrielle
BP 54
38110 LA TOUR DU PIN

Request date: 21 September 2004

Purpose: Fire behaviour of a fabric coating

Reference documents: FTP Code: International Code for Application of Fire
Test procedures
Resolution A.652 (16) of the International Maritime Organisation.
1993 Edition.

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It comprises 4 pages.**

1. PRESENT SAMPLE

The requester has supplied the National Test Laboratory (French acronym LNE) with a fabric coating, in three finishes representing the range, for fire behaviour tests in accordance with resolution A.652 (16) of the International Maritime Organisation.

The samples were received on 23 September 2004.

The following information was supplied by the requester.

1.1. REFERENCE : STAMSKIN TOP F4340

1.2. COMPOSITION OF CONSTITUENTS

1.2.1. Fabric coating

Composition : polyamide cloth (110 g/m²) covered in fire-proofed PVC on one side

Weight (g/m²) : 780 ± 5 %

Thickness (in mm) : 1.1 ± 10 %

Finishes tested : white, green and red

Treatment undergone : fire-proofing in the formulation of the PVC

2. CONDITIONING OF SAMPLES

The principle of the test is to submit the seat to fire sources associated with smokers, namely cigarettes and a small flame simulating a match. The cigarettes should have a combustion speed of 12 ± 3 min/50 cm and the little flame from 45 ml/min of butane is applied during 20 seconds.

As suggested in appendix A3 of the resolution, the coating was associated with a standard polyurethane foam with a density of 22 Kg/m³.

The tests were performed on 30 September 2004, after conditioning of samples and cigarettes, in an atmosphere of (23 ± 2)°C and (50 ± 5) % of relative humidity, in accordance with resolution A.652 (16) of the I.M.O.

3. RESULTS

3.1. TEST WITH CIGARETTE

For each finish, two applications were performed at the junction of the base/back, during which,

- the coating chars,
- the padding melts,
- the cigarettes burn out in under 13 minutes 30 seconds,
- light smoke is produced and dissipates in under 21 minutes.



The greatest distance damaged (in mm) is:

		base		back	
		surface	depth	surface	depth
White Finish	Application 1	3	2	3	2
	Application 2	4	2	4	2
Red Finish	Application 1	2	2	3	2
	Application 2	2	2	2	2
Green Finish	Application 1	4	3	4	3
	Application 2	4	5	4	5

3.2. MATCH TEST

For each finish; two applications were performed at the junction of the base/back, during which,

- the coating melts, ignites, chars and expands,
- the padding melts,
- light white smoke is produced.

After removing the burner,

- the flames persist,
- the fumes persist for less than 50 seconds.

		Persistence	
		Flame (s)	Smoke (s)
White Finish	Application 1	2	26
	Application 2	3	46
Red Finish	Application 1	2	25
	Application 2	3	29
Green Finish	Application 1	1	24
	Application 2	1	31



The greatest distance damaged (in mm) is:

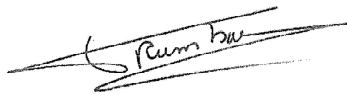
		base		back	
		surface	depth	surface	depth
White Finish	Application 1	9	2	10	2
	Application 2	11	2	11	2
Red Finish	Application 1	10	2	10	2
	Application 2	10	2	8	2
Green Finish	Application 1	5	2	10	2
	Application 2	9	2	10	2

4. CONCLUSION

The reference material "**STAMSKiN TOP F4340**" **passes** the lit cigarette test and **passes** the test with the small flame simulating a match in accordance with resolution A.652 (16) of the International Maritime Organisation, whilst associated with a polyurethane foam with a minimum density of 22 Kg/m³.

Trappes, 07 October 2004

Department Manager
Fire behaviour



Alain SAINRAT

Testing
Valérie LELIEVRE

Testing Officer




Valérie LELIEVRE

"Attention is drawn to the fact that the results obtained with the samples used for this test report cannot be generalised without justifying the representative nature of the samples and tests".

