



Ministero dell'Interno

DIPARTIMENTO DEI VIGILI DEL FUOCO DEL SOCCORSO PUBBLICO E DELLA DIFESA CIVILE
DIREZIONE CENTRALE PER LA PREVENZIONE E LA SICUREZZA TECNICA
UFFICIO PER LA PROTEZIONE PASSIVA, PROTEZIONE ATTIVA, SETTORE MERCEOLOGICO E LABORATORI

VISTO il Decreto Ministeriale 26 giugno 1984 concernente "Classificazione di reazione al fuoco ed omologazione ai fini della prevenzione incendi";

VISTI il Decreto Ministeriale 03 Settembre 2001, recante "Modifiche ed integrazioni al Decreto 26 giugno 1984 concernente classificazione di reazione al fuoco ed omologazione ai fini della prevenzione incendi" e il Decreto Ministeriale 28 maggio 2002 recante rettifiche al decreto medesimo;

VISTA l'istanza presentata dalla ditta MARIO SIRTORI S.p.A. sita in Via Papa Giovanni XXIII, 10 23845 COSTAMASNAGA (CO), produttrice del materiale denominato "ALAMO" per ottenere l'omologazione del materiale stesso ai fini della prevenzione incendi;

VISTO il certificato di reazione al fuoco n. RF 05/15 del 25/05/2015 e la successiva nota integrativa n. 59/16 del 09/09/2016 emessi per il predetto materiale dal Laboratorio CENTRO TESSILE SERICO di Como (CO);

VISTA la scheda tecnica, allegata al predetto certificato, prodotta dalla ditta MARIO SIRTORI S.p.A. di COSTAMASNAGA (CO);

SI OMOLOGA

con il numero di codice CO125D10A100059, il prototipo del materiale denominato "ALAMO" prodotto dalla ditta MARIO SIRTORI S.p.A. di COSTAMASNAGA (CO), ai soli fini della prevenzione incendi, nella CLASSE di REAZIONE al FUOCO 1 (UNO) e se ne AUTORIZZA la riproduzione, ai sensi dei decreti ministeriali citati in premessa, conformemente a tutte le caratteristiche apparenti e non apparenti, nonché a quelle dichiarate dalla predetta ditta nella scheda tecnica parimenti citata in premessa.

Sul marchio o sulla dichiarazione di conformità, da allegarsi ad ogni tipo di fornitura del materiale oggetto della presente omologazione, dovranno essere riportati:

- NOME DEL PRODUTTORE: Ditta MARIO SIRTORI S.p.A. (o altro segno distintivo);
- ANNO DI PRODUZIONE (da indicarsi);
- CLASSE DI REAZIONE AL FUOCO: 1 (UNO);
- CODICE: CO125D10A100059;
- POSA IN OPERA: SOSPESO SUSCETTIBILE DI PRENDERE FUOCO SU AMBO LE FACCE;
- IMPIEGO: SIPARI DRAPPEGGI TENDAGGI;
- MANUTENZIONE: METODO "A" COME DA UNI 9176 (1998).

Si richiamano tutti gli obblighi di legge spettanti al produttore e a tutti i soggetti comunque interessati, a norma del Codice Civile, del Codice Penale e dei decreti ministeriali 26 giugno 1984 e 3 settembre 2001.

Il presente atto, ad eccezione dei casi di decadenza e revoca dell'omologazione previsti dall'art. 9, punti 2 e 3, del D.M. 26/6/84, ha una validità di 5 anni dalla data di rilascio ed è rinnovabile alla sua scadenza.

Roma, 24 OTT. 2016

IL DIRETTORE CENTRALE
(Pulito)

Firmato in forma digitale ai sensi di legge



Fasc. 3807 sott.166





Report nr.	1501655-003
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TEST	M.U.	RESULTS
25145 DIMENSIONAL CHANGE TO DRYCLEANING WITH PERCHLOROETHYLENE		
Method: UNI EN ISO 3759 :2011, UNI EN ISO 3175-1:2010, UNI EN ISO 3175-2 :2010, UNI EN ISO 5077 :2008		
Instrument: Dry cleaning machine with Perchloroethylene - PLANET 20 - Renzacci		
Solvent used: PERCHLOROETHYLENE		
Dry cleaning procedure: Sensible		
Finishing: Type B - pressing by ironing with steam		
No. of dry cleaning and finishing treatments: 01		
No. of specimens for each tests: 01		
Dimensional changes after dry-cleaning (without finishing)		
DIMENSIONAL CHANGE - WIDTH direction	%	-1,4
DIMENSIONAL CHANGE - LENGHT direction	%	-0,2
Dimensional changes after dry-cleaning and finishing		
DIMENSIONAL CHANGE - WIDTH direction	%	-2,3
DIMENSIONAL CHANGE - LENGHT direction	%	+0,7

15046 Preparation of materials to fire tests: 5 washing cycles

Method: UNI 9176 (1998) - Method A
Instrument: WASHING-MACHINE ELECTROLUX WASCATOR mod. FOM 71 MP LAB

PROCEDURE:
 The sample has been submitted to 5 washing cycles in a solution of water and detergent; after each washing, the sample has been dried in a drying oven at the temperature of 60° C for 2 hours.
 Washing temperature: 40° C degrees
 Ratio material/solution: 1:3
 After all washing cycles, the sample has been ironed and submitted to fire test.

15016 Reaction to fire by applying a small flame: FLAME ON BOTH SURFACES

Method: UNI 8456: 1987
Instrument: Flammability Chamber - Noselab
Sample pretreatment:
 sample was subjected to 5 washing cycles, as above described
Number of specimens tested: n. 10
Time of application of flame: s 12
CATEGORY ASSIGNED TO TESTED MATERIAL FIRST CATEGORY
Annex n.: 1F

Details of the test results related to each specimen can be seen in the annex of this test report.



Report nr.	1501655-003
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TEST	M.U.	RESULTS
15236 Reaction to fire of material can be hit by flame with RADIANT HEATING		
Method:	UNI 9174 (1987) + A1 (1996)	
Instrument:	Radiant Pannel - ATS FAAR	
Sample pretreatment:	sample was subjected to 5 washing cycles, as above described	
Specimens position:		on the wall
Preparation of the sample:		hanging
Number of specimens tested:	n.	6
CATEGORY ASSIGNED TO TESTED MATERIAL		FIRST CATEGORY
Annex n.:		2F

Details of the test results related to each specimen can be seen in the annex of this test report.

Reference methods:
 Ministerial Decree 26/06/1984 - Decree of Minister of the Interior 3/9/2001

Test is NOT effective for ministerial certification.

15906 Reaction to fire. Combustible materials classification.

Method: UNI 9177 (1987)

SAMPLE MEETS THE CLASS 1 REQUIREMENTS

This classification follows from the results of the tests executed according to UNI 8456 and UNI 9174, as above reported.



Annex n. 1F to test report n. 1501655-003

DETAILS OF TEST RESULTS

Test executed according to UNI 8456:1987:

Combustible materials which can be hit by flame on both surface – Reaction to fire by applying a small flame

Article description: **S12788**

Declared composition: **100% Trevira**

Sample pretreatment: **sample was submitted to 5 washing cycles, according to UNI 9176 – method A**

Date of test: **11.03.2015**

specimen direction	Afterflame time		Afterglow time		Extent damaged area		Drip	
	time (s)	level	time (s)	level	length (mm)	level	time (s)	level
warp	2	1	0	1	50	1	Drops off	1
warp	3	1	0	1	53	1	Drops off	1
warp	2	1	0	1	48	1	Drops off	1
warp	3	1	0	1	54	1	Drops off	1
warp	1	1	0	1	56	1	Drops off	1
weft	2	1	0	1	47	1	Drops off	1
weft	12	2	0	1	64	1	Drops off	1
weft	4	1	0	1	55	1	Drops off	1
weft	2	1	0	1	47	1	Drops off	1
weft	2	1	0	1	60	1	Drops off	1
Total level:		1		1		1		1
Multiplier factor:		2		1		2		1
Total:		2		1		2		1

Combined total Levels for the multiplication factor: 6

CATEGORY ASSIGNED TO THE SAMPLE: FIRST CATEGORY

**Annex n. 1F to test report n. 1501655-003****Levels of material behavior (ref. UNI 8456:1987)****1- Afterflame time**

Level 1: less than or equal to 5 seconds

Level 2: greater than 5 seconds but less than or equal to 60 seconds

Level 3: greater than 60 seconds

2- Afterglow time

Level 1: less than or equal to 10 s

Level 2: greater than 10 seconds but less than or equal to 60 seconds

Level 3: greater than 60 seconds

3- Extension damaged area

Level 1: less than or equal to 150 mm

Level 2: greater than 150 mm but less than or equal to 200 mm

Level 3: greater than 200 mm

4- Drip

Level 1: absent or with any droplets and / or chipping off at the time of contact with the bottom of the combustion chamber

Level 2: drops and / or loose parts are inflamed, but off within 3 seconds

Level 3: drops and / or loose parts inflamed for more than 3 seconds

If a product burns completely in a time less than or equal to 17 s from the beginning of the test (this time includes the 12 s ignition with flame and 5 s post-combustion), its behavior is attributed last category. When the product burns over 10 min, it is assumed that the damaged area is level 3.

CATEGORIES IN RELATION TO THE AMOUNT OF LEVELS FOR MULTIPLYING FACTOR

CATEGORIES	Combined total Levels for the multiplication factor
I	6-8
II	9-12
III	13-15
IV	16-18



Annex n. 2F to test report n. 1501655-003

DETAILS OF TEST RESULTS

**Test executed according to UNI 9174 (1987) + UNI 9174/A1/96:
 Reaction to fire of materials can be hit by flame with radiant heating**

Article description: **S12788**

Declared composition: **100% Trevira**

Sample pretreatment: **sample was submitted to 5 washing cycles, according to UNI 9176/98 – method A**

Specimen position: **to the wall**

Preparation of the sample: **hanging**

Date of test: **11.03.2015**

specimen direction	Average speed of flame propagation		Post-glow time		Extent of damage		Drip	
	speed (mm/min)	level	time (s)	level	length (mm)	level	time (s)	level
warp	See note 1	1	0	1	See note 1	1	Parts off	1
warp	See note 1	1	0	1	See note 1	1	Parts off	1
warp	See note 1	1	0	1	See note 1	1	Parts off	1
weft	See note 1	1	0	1	See note 1	1	Parts off	1
weft	See note 1	1	0	1	See note 1	1	Parts off	1
weft	See note 1	1	0	1	See note 1	1	Parts off	1
Total level:		1		1		1		1
Multiplier factor:		2		1		2		1
Total:		2		1		2		1

Total of all levels: 6

Note 1:

The speed of propagation of the flame and the damaged area is not detectable because the fabric melts without flame propagation.

CATEGORY ASSIGNED TO THE SAMPLE: FIRST CATEGORY



Annex n. 2F to test report n. 1501655-003

LEVELS OF CONDUCT OF THE PRODUCTS (ref. UNI 9174:1987)

Rate of spread of flame

Level 1: speed can not be measured because the flame does not reach the 150 mm (third goal).

Level 2: propagation velocity less than or equal to 30 mm / min.

Level 3: velocity of propagation greater than 30 mm / min.

Damaged area

Level 1: less than 350 mm.

Level 2: between 350 mm and 600 mm.

Level 3: greater than 600 mm.

Post-glow

Level 1: less than or equal to 180 s.

Level 2: greater than 180 seconds but less than or equal to 360 s.

Level 3: greater than 360 s.

Drip

Level 1: absent or with any droplets and / or chipping off at the time of contact with the bottom of the combustion chamber

Level 2: drops and / or loose parts are inflamed, but off within 3 seconds

Level 3: drops and / or loose parts inflamed for more than 3 seconds

Special cases

If the material burns in the presence of flame over 60 min, it is assumed that the damaged area is level 3. The speed of propagation of the flame is calculated between 100 mm and the last goal achieved by the flame itself. The drip and glow are those already detected earlier.

In the case in which the speed of propagation of the flame is greater than or equal to 200 mm / min and the damaged area is greater than or equal to 650 mm the material is placed in the last category.

For the materials in the test position to the wall, in the case in which the speed of propagation of the flame is greater than 30 mm / min and the damaged area is less than or equal to 200 mm, is conventionally attached to the level 2 at the speed of propagation of the flame.

For textile materials which can be hit by the fire on both faces (in the test position to the wall) in the case in which the speed of propagation of the flame is greater than 30 mm / min and in the case in which the damaged area is less than or equal to 300 mm is attached conventionally to the speed of propagation of the flame level 2.

Note:

The time of post-glow is detected always starting at 300 mm from the edge of the specimen closest to the radiant panel.

The damaged area is detected by measuring the length between the edge of the specimen closest to the radiant panel and the ultimate goal achieved by the flame

**Annex n. 2F to test report n. 1501655-003**

CATEGORIES IN RELATION TO THE AMOUNT OF LEVELS FOR MULTIPLYING FACTOR**Specimen "TO THE WALL"**

CATEGORIES	Combined total Levels for the multiplication factor
I	6-8
II	9-12
III	13-15
IV	16-18

Specimen "ON FLOOR"

CATEGORIES	Combined total Levels for the multiplication factor
I	5-7
II	8-10
III	11-13
IV	14-15

Specimen "ON CEILING"

CATEGORIES	Combined total Levels for the multiplication factor
I	7-9
II	10-13
III	14-17
IV	18-21