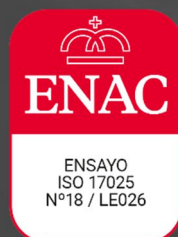


**TEST REPORT**  
**IN-02289/2022-1**

**INDETEX NV**  
Rue du Mont-Gallois, 58  
B-7700 – Mouscron  
Belgium

Date of issue: November 25<sup>th</sup>, 2022



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## TEST REPORT

**Report number:** IN-02289/2022-1

**Total pages:** 16

## SAMPLE RECEIVED

### Information provided by the applicant:

Description: HADES  
Reference: HADES

### Internal description and identification:

Description: Fabric  
Reference: M-02289/22



**Date of entry:** September 09<sup>th</sup>, 2022

## REQUESTED TESTS

- TEXTILES. DOMESTIC WASHING AND DRYING PROCEDURES FOR TEXTILE TESTING  
EN ISO 6330:2012
- TEXTILES AND TEXTILE PRODUCTS. BURNING BEHAVIOUR. CURTAINS AND DRAPES. DETAILED  
PROCEDURE TO DETERMINE THE IGNIABILITY OF VERTICALLY ORIENTED SPECIMENS (SMALL  
FLAME)  
EN 1101:1995/A1:2005
- TEXTILES AND TEXTILE PRODUCTS. BURNING BEHAVIOUR. CURTAINS AND DRAPES.  
MEASUREMENT OF FLAME SPREAD OF VERTICALLY ORIENTED SPECIMENS WITH LARGE  
IGNITION SOURCE  
EN 13772:2011
- TEXTILES AND TEXTILE PRODUCTS. FIRE BEHAVIOUR. CURTAINS AND DRAPERIES.  
CLASSIFICATION SCHEME  
EN 13773:2003



|                            |   |
|----------------------------|---|
| <b>Test standard:</b>      | EN ISO 6330:2012  |
| <b>According to:</b>       | Not applicable  |
| <b>Date of completion:</b> | October 13 <sup>th</sup> - November 17 <sup>th</sup> , 2022 |

|  |
|--|
| <b>Test equipment:</b>                             |
| Washing machine, WASCATOR FOM 71 MP-Lab, no. EQ418 |
| Balance, SARTORIUS, no. EQ116                      |

|  |
|--|
| <b>Test conditions:</b>  |
| Conditioning of the specimens: $\geq 24$ hours at $(20 \pm 2)^{\circ}\text{C}$ and $(65 \pm 4)\% \text{RH}$  |
| Internal identification of specimens: M-02289/22   |
| Washing conditions: <ul style="list-style-type: none"><li>• Procedure: 3N</li><li>• Temperature: <math>30^{\circ}\text{C}</math></li><li>• Washing powder: Without phosphates ECE-98</li><li>• Total mass of the specimens: 580,8 g (1 cycle) and 420,3 g (12 cycles)</li><li>• Type of load: Panels composed of four thicknesses of 100% textured polyester knitted fabric, with a mass per unit area of <math>(310 \pm 20) \text{g/m}^2</math>, and dimensions of <math>(20 \pm 4) \text{cm} \times (20 \pm 4) \text{cm}</math></li><li>• Total counterweight mass: 1403,8 g (1 cycle) and 1491,8 g (12 cycles)</li><li>• Total load: <math>(2 \pm 0,1) \text{kg}</math></li></ul> |
| Drying procedure: A (Air drying) (each cycle)  |
| Number of cycles of washing and drying procedure: 1 and 12   |

|   |   |
|---|---|
|   | <b>TEXTILES AND TEXTILE PRODUCTS. BURNING BEHAVIOUR.<br/>COURTAINS AND DRAPES. DETAILED PROCEDURE TO<br/>DETERMINE THE IGNIABILITY OF VERTICALLY ORIENTED<br/>SPECIMENS (SMALL FLAME)</b> |
|---|---|

|                            |                                  |
|----------------------------|----------------------------------|
| <b>Test standard:</b>      | EN 1101:1995/A1:2005             |
| <b>According to:</b>       | Not applicable                   |
| <b>Date of completion:</b> | November 09 <sup>th</sup> , 2022 |

|  |
|--|
| <b>Test equipment:</b>                               |
| Vertical flammability test equipment, JBA, no. EQ299 |
| Chronometer, VENTIX, no. EQ1389                      |
| Anemometer, TESTO, no. PA075                         |

|   |
|---|
| <b>Test conditions:</b>   |
| Conditioning of specimens: $\geq 24$ hours at $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and $65\% \text{ RH} \pm 5\% \text{ RH}$   |
| Test atmosphere: $20,6^{\circ}\text{C} / 59,9\% \text{ RH}$   |
| Internal identification of specimens: M-02289/22  |
| Type of test: According to the applicant's request <ul style="list-style-type: none"><li>After washing: EN ISO 6330:2012, 1 cycle, <math>30^{\circ}\text{C}</math>, drying procedure – A (after conditioning)</li></ul> |
| Number of specimens (according to UNE-EN ISO 6940:2004): 24 (12 lengthwise, 12 widthwise)   |
| Dimensions of the specimens: $200 \text{ mm} \pm 2 \text{ mm} \times 80 \text{ mm} \pm 2 \text{ mm}$  |
| Anisotropic material: No  |
| Flame height: $40 \text{ mm} \pm 2 \text{ mm}$  |
| Test equipment setting (according to UNE-EN ISO 6940:2004): Procedure B – Ignition from the bottom edge (burner tilted $30^{\circ}$ )   |
| Air speed: $< 0,2 \text{ m/s}$  |
| Tested area: Bottom edge  |
| Type of gas: Propane, commercial grade  |

**Results:**

**Preliminary test, according to EN 1101:1996/A1:2005, section 7**

| Lengthwise / Warp          |         | Widthwise / Weft           |         |
|----------------------------|---------|----------------------------|---------|
| Flame application time (s) | Results | Flame application time (s) | Results |
| 1                          | O       | 1                          | O       |
| 2                          | O       | 2                          | O       |
| 3                          | O       | 3                          | O       |
| 4                          | O       | 4                          | O       |
| 5                          | O       | 5                          | O       |
| 10                         | O       | 10                         | O       |
| 15                         | O       | 15                         | O       |
| 20                         | O       | 20                         | O       |

X: Ignition / O: Non-ignition

**Test according to EN ISO 6940:2004, section 11**

| Specimen no. | Lengthwise / Warp          |         | Widthwise / Weft           |         |
|--------------|----------------------------|---------|----------------------------|---------|
|              | Flame application time (s) | Results | Flame application time (s) | Results |
| #1           | 20                         | O       | 20                         | O       |
| #2           | 20                         | O       | 20                         | O       |
| #3           | 20                         | O       | 20                         | O       |
| #4           | 20                         | O       | 20                         | O       |
| #5           | 20                         | O       | 20                         | O       |

X: Ignition / O: Non-ignition

**Mean ignition time, according to EN ISO 6940 - Annex B.2**

| Flame application time (s) | Lengthwise / Warp        |                                 | Widthwise / Weft         |                                 |
|----------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|
|                            | Number of ignition cases | Number of cases of non-ignition | Number of ignition cases | Number of cases of non-ignition |
| 1                          | 0                        | 1                               | 0                        | 1                               |
| 2                          | 0                        | 1                               | 0                        | 1                               |
| 3                          | 0                        | 1                               | 0                        | 1                               |
| 4                          | 0                        | 1                               | 0                        | 1                               |
| 5                          | 0                        | 1                               | 0                        | 1                               |
| 10                         | 0                        | 1                               | 0                        | 1                               |
| 15                         | 0                        | 1                               | 0                        | 1                               |
| 20                         | 0                        | 5                               | 0                        | 5                               |

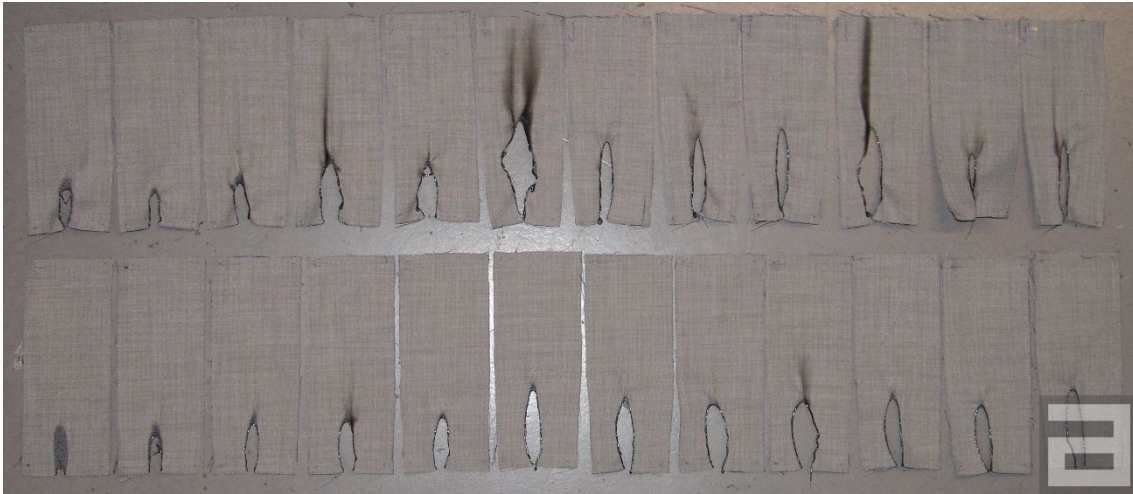
**Comments**


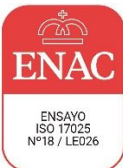
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----

|                                      | Lengthwise / Warp | Widthwise / Weft |
|--------------------------------------|-------------------|------------------|
| Mean ignition time (s)               | ≥ 20              | ≥ 20             |
| Minimum ignition time (s)            | ≥ 20              |                  |
| Ignition of the specimen within 20 s | No                | No               |

**Picture after testing:**



|   |   |  |
|---|---|--|
|  |  | <b>TEXTILES AND TEXTILE PRODUCTS. BURNING BEHAVIOUR.<br/>         CURTAINS AND DRAPES. MEASUREMENT OF FLAME<br/>         SPREAD OF VERTICALLY ORIENTED SPECIMENS WITH<br/>         LARGE IGNITION SOURCE</b> |
|---|---|--|

|                            |                                  |
|----------------------------|----------------------------------|
| <b>Test standard:</b>      | EN 13772:2011                    |
| <b>According to:</b>       | Not applicable                   |
| <b>Date of completion:</b> | November 18 <sup>th</sup> , 2022 |

|  |
|--|
| <b>Test equipment:</b>                               |
| Vertical flammability test equipment, JBA, no. EQ299 |
| Chronometer, VENTIX, no. EQ2140                      |
| Anemometer, TESTO, no. EQ3425                        |
| Milimeter ruler, no. EQ285                           |

|  |
|--|
| <b>Test conditions:</b>  |
| Conditioning of specimens: $\geq 24$ hours at $(20 \pm 2)$ °C and $(65 \pm 5)\%$ RH  |
| Test atmosphere: 21,7°C / 61,9% RH   |
| Internal identification of specimens: M-02289/22   |
| Type of test: According to the applicant's request <ul style="list-style-type: none"> <li>• In-as received conditions (after conditioning)</li> <li>• After washing: EN ISO 6330:2012, 12 cycles, 30°C, drying procedure – A (after conditioning)</li> </ul> |
| Sampling (according to EN 13772:2011): <ul style="list-style-type: none"> <li>• Number of specimens: 8 (4 lengthwise, 4 widthwise)</li> <li>• Dimensions of the specimens: 560 mm <math>\pm</math> 2 mm x 170 mm <math>\pm</math> 2 mm</li> </ul>            |
| Material with different sides: Yes <ul style="list-style-type: none"> <li>• Side A: Fabric</li> <li>• Side B: Smooth</li> </ul>  |
| Reference material used: <ul style="list-style-type: none"> <li>• Standard cotton fabric (internal ref.MR006)</li> <li>• Standard cotton marker thread (internal ref.MR007)</li> <li>• Standard paper filter (internal ref.MR008)</li> </ul>                 |
| Temperature increase ratio between 40°C and 100°C: $(3,0 \pm 1)$ °C/s  |
| Flame height: 40 mm $\pm$ 2 mm   |
| Air speed: < 0,2 m/s   |
| Tested area: Bottom edge   |
| Type of gas: Propane, commercial grade   |

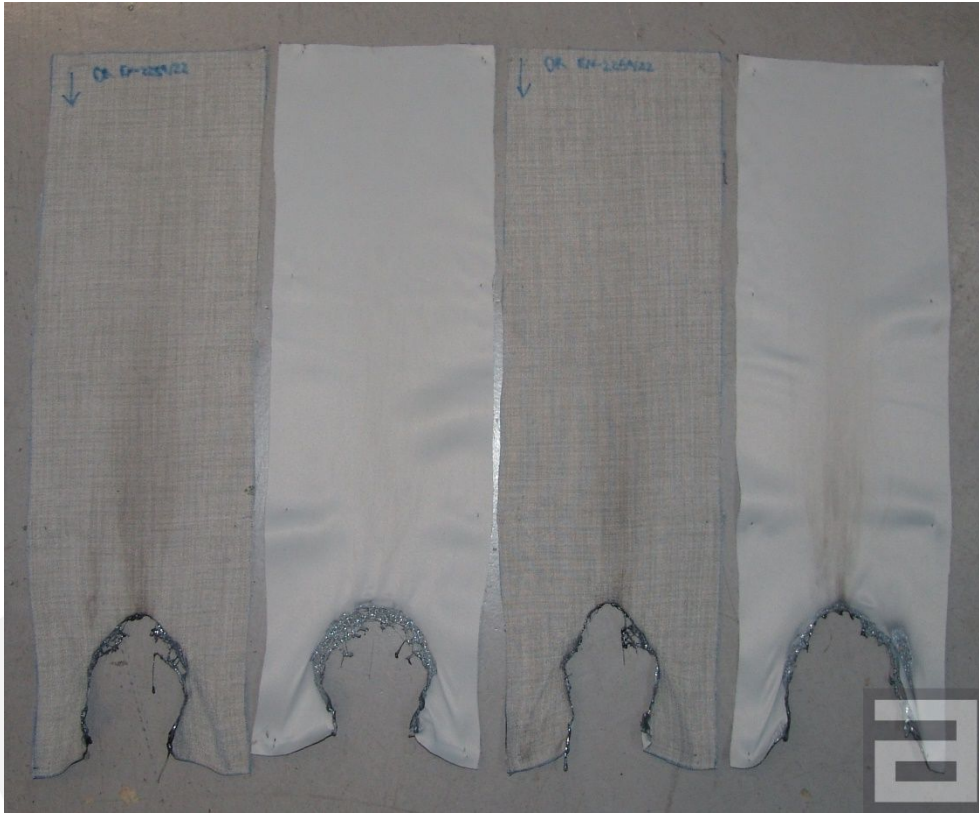
**Results:**

|   | In as-received conditions |     |     |     |                  |     |     |     |
|---|---------------------------|-----|-----|-----|------------------|-----|-----|-----|
|   | Lengthwise / Warp         |     |     |     | Widthwise / Weft |     |     |     |
| Specimen no.  | #1                        | #2  | #3  | #4  | #1               | #2  | #3  | #4  |
| Side (A/B)  | A                         | B   | A   | B   | A                | B   | A   | B   |
| 1 <sup>st</sup> marking thread breaking   | No                        | No  | No  | No  | No               | No  | No  | No  |
| 2 <sup>nd</sup> marking thread breaking   | No                        | No  | No  | No  | No               | No  | No  | No  |
| 3 <sup>rd</sup> marking thread breaking   | No                        | No  | No  | No  | No               | No  | No  | No  |
| Specimen burns and extinguishes before the 1 <sup>st</sup> marking thread       | Yes                       | Yes | Yes | Yes | Yes              | Yes | Yes | Yes |
| Time elapsed from flame application to break 3 <sup>rd</sup> marking thread (s) | ---                       | --- | --- | --- | ---              | --- | --- | --- |
| Uncertainty (s)   | ---                       |     |     |     | ---              |     |     |     |
| Length of the damaged area (mm)   | 125                       | 126 | 116 | 121 | 123              | 114 | 132 | 122 |
| Uncertainty (mm)  | ± 7                       |     |     |     | ± 12             |     |     |     |
| Ignited dripping or residues burn the filter paper                              | No                        | No  | No  | No  | No               | No  | No  | No  |



|   | After washing     |     |     |     |                  |     |     |     |
|---|-------------------|-----|-----|-----|------------------|-----|-----|-----|
|   | Lengthwise / Warp |     |     |     | Widthwise / Weft |     |     |     |
| Specimen no.  | #1                | #2  | #3  | #4  | #1               | #2  | #3  | #4  |
| Side (A/B)  | A                 | B   | A   | B   | A                | B   | A   | B   |
| 1 <sup>st</sup> marking thread breaking   | No                | No  | No  | No  | No               | No  | No  | No  |
| 2 <sup>nd</sup> marking thread breaking   | No                | No  | No  | No  | No               | No  | No  | No  |
| 3 <sup>rd</sup> marking thread breaking   | No                | No  | No  | No  | No               | No  | No  | No  |
| Specimen burns and extinguishes before the 1 <sup>st</sup> marking thread       | Yes               | Yes | Yes | Yes | Yes              | Yes | Yes | Yes |
| Time elapsed from flame application to break 3 <sup>rd</sup> marking thread (s) | ---               | --- | --- | --- | ---              | --- | --- | --- |
| Uncertainty (s)   | ---               |     |     |     | ---              |     |     |     |
| Length of the damaged area (mm)   | 114               | 120 | 110 | 137 | 109              | 130 | 115 | 129 |
| Uncertainty (mm)  | ± 19              |     |     |     | ± 17             |     |     |     |
| Ignited dripping or residues burn the filter paper                              | No                | No  | No  | No  | No               | No  | No  | No  |

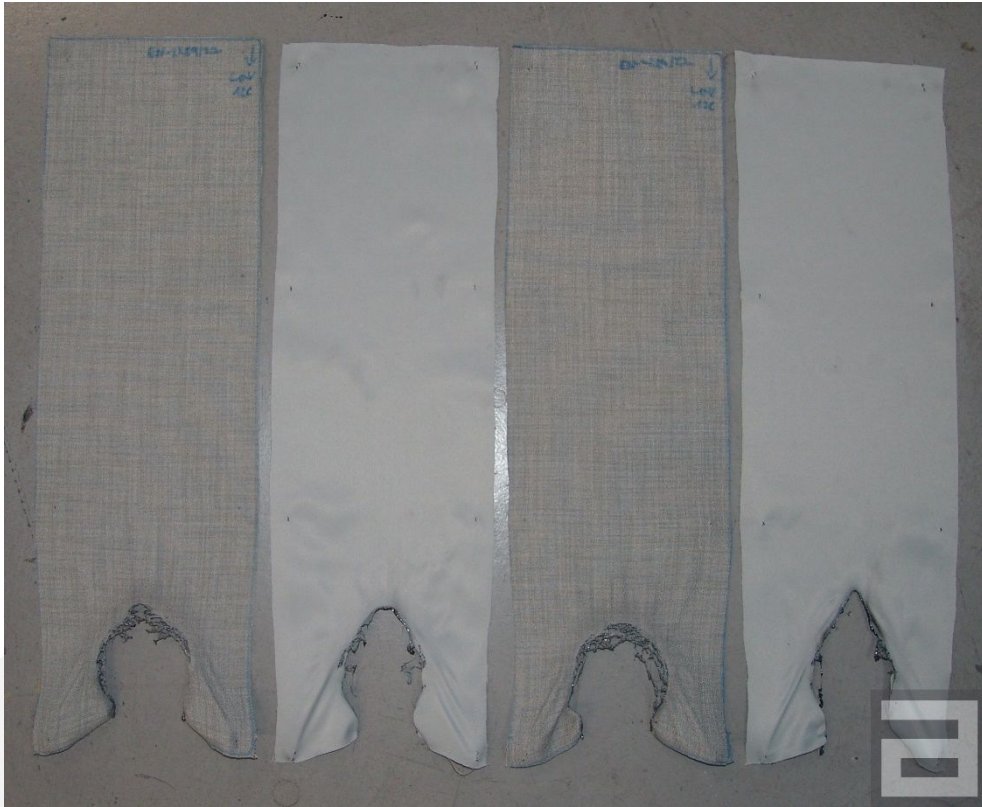
**Pictures after testing:**



As-received conditions. Direction: Lengthwise / Warp



As-received conditions. Direction: Widthwise / Weft



After washing. Direction: Lengthwise / Warp



After washing. Direction: Widthwise / Weft

|   |  |
|---|--|
|   | <b>TEXTILES AND TEXTILE PRODUCTS. FIRE BEHAVIOUR.<br/>                 CURTAINS AND DRAPERIES. CLASSIFICATION SCHEME</b> |
|---|--|



|                            |                                  |
|----------------------------|----------------------------------|
| <b>Test standard:</b>      | EN 13773:2003                    |
| <b>According to:</b>       | Not applicable                   |
| <b>Date of completion:</b> | November 18 <sup>th</sup> , 2022 |

**Classification criteria, according to EN 13773:2003, section 5, table 1**

| Class | Flammability  | Flame spread   |
|-------|---|--|
| 1     | Non-ignition according to standard EN 1101:1995/A1:2005 | First marking thread unaffected, without traces of flame action, according to the standard EN 13772:2011 |
| 2     | Non-ignition according to standard EN 1101:1995/A1:2005 | Third marking thread unaffected, without traces of flame action, according to the standard EN 13772:2011 |
| 3     | Non-ignition according to standard EN 1101:1995/A1:2005 | Third marking thread affected, and/or traces of flame action, according to standard EN 13772:2011        |
| 4     | Ignition according to standard EN 1101:1995/A1:2005     | Unaffected third marking thread without traces of flame action, according to standard EN 1102:2016       |
| 5     | Ignition according to standard EN 1101:1995/A1:2005     | Affected third marking thread and/or traces of flame action, according to standard EN 1102:1996          |

|                       |                |
|-----------------------|----------------|
| <b>CLASSIFICATION</b> | <b>CLASS 1</b> |
|-----------------------|----------------|

**SIGNATURE OF AUTHORISED PERSONNEL**

|   |  |
|---|--|
|  |  |
| <b>Advanced Technology Services<br/>Technical Manager - Materials Area</b>        | <b>Advanced Technology Services<br/>Head of Department</b>                         |
| Albert Briz   | Jordi Jamilena   |



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## TEXTILES AND TEXTILE PRODUCTS. FIRE BEHAVIOUR. CURTAINS AND DRAPERIES. CLASSIFICATION SCHEME

The material intended to be used in/as hanging textile elements, such as  
curtains, drapes, etc., referenced as:

### HADES

Submitted by:

**INDETEX NV**  
**Rue du Mont-Gallois, 58**  
**B-7700 – Mouscron**  
**Belgium**

It has been tested at LEITAT–Technological Center (report **IN-02289/2022-1**)  
according to **EN 1101:1995/A1:2005** and **EN 13772:2011**.

The classification according to the requirements of the standard  
**EN-13773:2003** is:

### CLASS 1

Terrassa, November 25<sup>th</sup>, 2022



Albert Briz  
Technical Manager – Materials Area

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