

Nombre Artículo / Article Name **SANDWICH M**

Código Artículo / Article Code **B6811**

Composición / Composition PES/PA 80/20

Peso / Weight (±10%) 126 g/m2

Ancho / Width (±5%) 148/150 cm

Colores / Colours Blanco y negro / Black and white

Características / Characteristics **En base a norma armonizada UNE EN 14683:2019 + AC:2019**
 Transpirable / Breathable (19 +/-1 Pa/cm2)
 Hidrófugo que repele el agua y las microgotas / Waterproof
 Barrera para virus y bacterias / Barrier for viruses and bacteria
 Respetuoso con el medio ambiente
Apto para estampación



Mantenimiento / Maintenance



Permite lavado a máquina hasta 60°C
 Allows washing machine up to 60°C



No usar lejía
 Do not use chlorine



Planchado medio
 Medium ironing



No lavar en seco
 Dry washing not allowed



No centrifugar / Do not spin



No se puede secar en secadora
 It can't be tumble dry

Nota / Remark:

Los valores indicados sólo son aproximados y no vinculantes / The stated values only are approximate and not binding.



RESUMEN / SUMMARY

Realizados sobre el siguiente material (sin confeccionar la mascarilla):
Carried out on the following material (without making the mask):

Tejido Ref. TEC 7191 Estampado (ORIGINAL)

Ensayos basados en la norma EN 14683:2019+AC: 2019.
Tests according to the standard EN 14683:2019+AC: 2019.

Habiéndose obtenido los siguientes resultados:
Having obtained the following results:

ENSAYOS TESTS		RESULTADOS RESULTS (Promedio ± DS) (Average ± SD)
Pto 5.2.2	Eficacia de la filtración bacteriana* (BFE) (%) <i>Bacterial Filtration Efficiency* (BFE) (%)</i>	93,50 ± 1,16
Pto 5.2.3	Respirabilidad: Presión diferencial* (Pa/cm ²) <i>Breathability: Differential pressure* (Pa/cm²)</i>	27 ± 1

Observaciones

Notes

- El resto de ensayos de la norma no indicados en este informe, no han sido evaluados.
- The rest of the standard tests not indicated in this report, have not been evaluated.
- DS: Desviación estándar.
- SD: Standard Deviation.



RESUMEN / SUMMARY

Realizados sobre el siguiente material (sin confeccionar la mascarilla):
Carried out on the following material (without making the mask):

Tejido Ref. TEC 7191 Estampado (DESPUÉS DE 10 CICLOS DE LAVADO)

Ensayos basados en la norma EN 14683:2019+AC: 2019.
Tests according to the standard EN 14683:2019+AC: 2019.

Habiéndose obtenido los siguientes resultados:
Having obtained the following results:

ENSAYOS TESTS		RESULTADOS RESULTS (Promedio ± DS) (Average ± SD)
Pto 5.2.2	Eficacia de la filtración bacteriana* (BFE) (%) <i>Bacterial Filtration Efficiency* (BFE) (%)</i>	90,75 ± 6,29
Pto 5.2.3	Respirabilidad: Presión diferencial* (Pa/cm ²) <i>Breathability: Differential pressure* (Pa/cm²)</i>	21 ± 1

Observaciones

Notes

- El resto de ensayos de la norma no indicados en este informe, no han sido evaluados.
- *The rest of the standard tests not indicated in this report, have not been evaluated.*
- DS: Desviación estándar.
- *SD: Standard Deviation.*



Judit Sisternes
Responsable Unidad de Gestión Productos para la Salud e Higiene
Head of Health & Hygiene Products Division

Digitally signed by JUDIT SISTERNES
NAVARRO - NIF:48292160A
Date: 2020.06.02 14:00:46 +02:00
Reason: Autorizado
Location: Alcoy



CLAUSULAS DE RESPONSABILIDAD

- 1.- AITEX responde únicamente de los resultados sobre los métodos de análisis empleados, consignados en el informe y referidos exclusivamente a los materiales o muestras que se indican en el mismo y que queden en su poder, limitando a éstos la responsabilidad profesional y jurídica del Centro. Salvo mención expresa, las muestras han sido libremente elegidas y enviadas por el solicitante.
- 2.- AITEX no se hace responsable en ningún caso del mal uso de los materiales ensayados ni de la interpretación o uso indebido que pueda hacerse de este documento.
- 3.- La Oferta o Pedido a la que da conformidad el solicitante a través de firma y sello, constituye el Acuerdo Legalmente ejecutable en el que AITEX es responsable de salvaguardar y garantizar, la confidencialidad absoluta, de la gestión de toda la información obtenida o creada durante el desempeño de las actividades contratadas.
- 4.- Ante posibles discrepancias entre informes, se procederá a una comprobación dirimente en la sede central de AITEX. Asimismo, el solicitante se obliga a notificar a AITEX cualquier reclamación que reciba con causa en el informe, eximiendo a este Centro de toda responsabilidad en caso de no hacerlo así, y considerando los plazos de conservación de las muestras.
- 5.- AITEX proporcionará a solicitud del interesado, el procedimiento de tratamiento de quejas.
- 6.- AITEX no se hace responsable de la información proporcionada por los clientes, que se refleja en el informe, y pueda afectar a la validez de los resultados.
- 7.- AITEX no se hace responsable de un estado inadecuado de la muestra recibida que pudiera comprometer la validez de los resultados, expresando tal circunstancia, en los informes de ensayo.
- 8.- AITEX podrá incluir en sus informes, análisis, resultados, etc., cualquier otra valoración que juzgue necesaria, aún cuando ésta no hubiere sido expresamente solicitada.
- 9.- Cuando se solicite Declaración de Conformidad, de no indicarse lo contrario, se aplicará la regla de decisión según ILAC-G8 & ISO 10576-1 con caso de ambigüedad o indeterminación.
- 10.- Las incertidumbres de ensayos, que se explicitan en el Informe de resultados, se han estimado para una $k=2$ (95% de probabilidad de cobertura). En caso de no informarse, éstas se encuentran a disposición del cliente en AITEX.
- 11.- Los materiales originales, o muestras sobrantes no sometidas a ensayo, se conservarán en AITEX durante los DOCE MESES posteriores a la emisión del informe, por lo que toda comprobación o reclamación que, en su caso, deseará efectuar el solicitante, se deberá ejercer en el plazo indicado.
- 12.- Este informe sólo puede enviarse o entregarse en mano al solicitante o a la persona debidamente autorizada por él.
- 13.- Los resultados de los ensayos y la declaración de cumplimiento con la especificación en este informe se refieren solamente a la muestra de ensayo tal como ha sido analizada/ensayada y no a la muestra/ítem del cual se ha sacado la muestra de ensayo.
- 14.- El cliente debe prestar atención, en todo momento, las fechas de la realización de los ensayos.
- 15.- De acuerdo a la Resolución EA (33) 31, los informes de ensayo deben incluir la identificación única de la muestra pudiendo añadirse además cualquier marca o etiquetado del fabricante. No está permitido reemitir informes de ensayo de denominaciones de muestras (referencias) no ensayadas, sólo se pueden volver a reemitir para la corrección de errores o la inclusión de datos omitidos que ya estaban disponibles en el momento del ensayo. El laboratorio no puede asumir la responsabilidad por la que se declara que el producto con el nuevo nombre comercial / marca comercial es estrictamente idéntico al ensayado originalmente; esta responsabilidad es del cliente.

LIABILITY CLAUSES

- 1.- AITEX is liable only for the results of the methods of analysis used, as expressed in the report and referring exclusively to the materials or samples indicated in the same which are in its possession, the professional and legal liability of the Centre being limited to these. Unless otherwise stated, the samples were freely chosen and sent by the applicant.
- 2.- AITEX shall not be liable in any case of misuse of the test materials nor for undue interpretation or use of this document
- 3.- The Offer and / or Order to which the applicant gives approval through signature and seal, constitutes the Legally Executable Agreement in which AITEX is responsible for safeguarding and guaranteeing the absolute confidentiality of the management of all the information obtained or created during the performance of the contracted activities.
- 4.- In the eventuality of discrepancies between reports, a check to settle the same will be carried out in the head offices of AITEX. Also, the applicants undertake to notify AITEX of any complaint received by them as a result of the report, exempting this Centre from all liability if such is not done, the periods of conservation of the samples being taken into account.
- 5.- AITEX is not responsible for the information provided by customers, which is reflected in the Report, and may affect the validity of the results.
- 6.- AITEX will provide at the request of the person concerned, the treatment of complaints procedure.
- 7.- AITEX is not responsible for an inadequate state of the sample received that could compromise the validity of the results, expressing such circumstance, in the test reports.
- 8.- AITEX may include in its reports, analyses, results, etc., any other evaluation which it considers necessary, even when it has not been specifically requested.
- 9.- When a Declaration of Conformity is requested, if not indicated otherwise, the decision rule will be applied according to ILAC-G8 & ISO 10576-1, in case of ambiguity, or indeterminacy
- 10.- The uncertainties of tests, which are made explicit in the Results Report, have been estimated for a $k = 2$ (95% probability of coverage). If not informed, they are available to the client in AITEX.
- 11.- The original materials and rests of samples, not subject to test, will be retained in AITEX during the twelve months following the issuance of the report, so that any check or claim which, in his case, wanted to make the applicant, should be exercised within the period indicated.
- 12.- This report may only be sent or delivered by hand to the applicant or to a person duly authorised by the same.
- 13.- The results of the tests and the statement of compliance with the specification in this report refer only to the test sample as it has been analyzed / tested and not the sample / item which has taken the test sample.
- 14.- The client must attend at all times, to the dates of the realization of the tests.
- 15.- According to Resolution EA (33) 31, the test reports must include the unique identification of the sample, and any brand or label of the manufacturer may be added. It is not allowed to re-issue test reports of untested sample names (references), they can only be re-issued for error correction or inclusion of omitted data that were already available at the time of the test. The laboratory can not assume responsibility for declaring that the product with the new trade name / trademark is strictly identical to the one originally tested; This responsibility belongs to the client.



TEST REPORT

Job No./Report No: 20-005246

Date: 26/06/2020

SOP305 - Change of appearance after washing (Garments and fabrics)

ID	ID AMSLab	Description	Conclusion
3	S-200603-00004	FABRIC WHITE (20 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
7	S-200617-00012	FABRIC WHITE (50 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
9	S-200619-00133	FABRIC WHITE (25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00004	S-200617-00012	S-200619-00133
Change of appearance after washing		No change	Slight change	Slight change
Number of cycles		20	50	25
Washing Temperature		60°C	60°C	60°C

Notes:

Note 1: Washing and drying process applied based on UNE-EN ISO 6330:2012

Note 2:

- Detergent: 20 gr of Commercial detergent / - Drying procedure: Air dry without tumble dry.
- n.a.: not applicable
- Requirement: No obvious change/colour/shape/appearance/seams/embroidery/trimmings/applications

Note 3 - Meaning of the grades of change of appearance:

- No change in appearance after washing and drying process
- Slight change in appearance after washing and drying process
- Moderate change in appearance after washing and drying process
- Severe change in appearance after washing and drying process

SOP 342- Bacterial Filtration Efficiency (BFE)

ID	ID AMSLab	Description	Conclusion
4	S-200603-00005	FABRIC WHITE (ORIGINAL)	See Results

	CAS	S-200603-00005
Test 1: Bacterial Filtration Efficiency		92.3
Test 1: Number of Bacteria		215
Test 2: Bacterial Filtration Efficiency		92.1
Test 2: Number of Bacteria		221
Test 3: Bacterial Filtration Efficiency		91.9
Test 3: Number of Bacteria		226
Test 4: Bacterial Filtration Efficiency		91.8
Test 4: Number of Bacteria		230
Test 5: Bacterial Filtration Efficiency		92.1
Test 5: Number of Bacteria		221

-The laboratory is not responsible for the information received by the client (grey shaded fields)

-Reported results do not include uncertainties (but are available for the customer).

-Opinions and interpretations expressed herein are outside the scope of accreditation.

-Unless otherwise stated the result shown in this test report refer only the sample/s tested and such sample/s are retained for 30 days only.

-Test reports without AMSLab seal and authorized signatures are invalid.

-This document can't be reproduced or modified except in full, without prior given approval of the company.

-Any printed copy of this document is copy from the original digital document.

Applied Mass Spectrometry Laboratory, S.L.U. Avda. Benigno Rivera, nº56 27003 Lugo (Spain)
Tel.: +34 962908074 - Fax.: +34 962803180 analyses@ams-lab.com / www.ams-lab.com



TEST REPORT

Job No./Report No: **20-005246**

Date: **26/06/2020**

Notes:

Test Method Ref: TS EN 14683:2019 Medical Face Masks, Requirements and Test Methods

Specifications applied:

Spanish specification UNE 0065:2020: $\geq 90\%$

European specification CWA 17553:2020: Level $\geq 90\%$ and Level $\geq 70\%$

Report unit Bacterial Filtration Efficiency = %

Report unit Number of Bacteria = cfu/mL

A specimen of the mask material is clamped between an impactor and an aerosol chamber. An aerosol of *Staphylococcus aureus* is introduced into the aerosol chamber and drawn through the mask material and the impactor under vacuum. The bacterial filtration efficiency of the mask is given by the number of colony forming units passing through the medical face mask material expressed as a percentage of the number of colony forming units present in the challenge aerosol.

Test Flow Rate: 28,3 L/min

Test Flow Time: 2 minute

Sample Sizes: 10x10 cm²

Microorganism: *Staphylococcus aureus* ATCC 6538

Bacterial concentration (cfu/ml) : 5x10E5 cfu/ml

Incubation conditions: 24 hour, 35C \pm 2C

Positive control sample average of number of Bacteria (C): 2.8x10E3 cfu/ml

(*) Test subcontracted. Results in subcontracted report number: 20015261

SOP 342- Bacterial Filtration Efficiency (BFE) - After Washing

ID	ID AMSLab	Description	Conclusion
5	S-200603-00006	FABRIC WHITE (AFTER 20 WASHING CYCLES AT 60°C)	See Results
8	S-200617-00013	FABRIC WHITE (AFTER 50 WASHING CYCLES AT 60°C)	See Results
11	S-200619-00135	FABRIC WHITE (AFTER 25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00006	S-200617-00013	S-200619-00135
Test 1: Bacterial Filtration Efficiency		85.2	80.0	83.4
Test 1: Number of Bacteria		415	425	465
Test 2: Bacterial Filtration Efficiency		85.0	80.1	83.5
Test 2: Number of Bacteria		421	421	462
Test 3: Bacterial Filtration Efficiency		84.8	81.0	82.9
Test 3: Number of Bacteria		426	403	478
Test 4: Bacterial Filtration Efficiency		84.6	80.9	82.9
Test 4: Number of Bacteria		430	405	460
Test 5: Bacterial Filtration Efficiency		85.0	80.7	83.6
Test 5: Number of Bacteria		421	410	460

Notes:

Test Method Ref: TS EN 14683:2019 Medical Face Masks, Requirements and Test Methods

Specifications applied:

Spanish specification UNE 0065:2020: $\geq 90\%$

European specification CWA 17553:2020: Level $\geq 90\%$ and Level $\geq 70\%$

- The laboratory is not responsible for the information received by the client (grey shaded fields)
- Reported results do not include uncertainties (but are available for the customer).
- Opinions and interpretations expressed herein are outside the scope of accreditation.
- Unless otherwise stated the result shown in this test report refer only the sample/s tested and such sample/s are retained for 30 days only.
- Test reports without AMSLab seal and authorized signatures are invalid.
- This document can't be reproduced or modified except in full, without prior given approval of the company.
- Any printed copy of this document is copy from the original digital document.

Applied Mass Spectrometry Laboratory, S.L.U. Avda. Designe Rivera, nº56 27003 Lugo (Spain)
Tel.: +34 982608574 - Fax.: +34 982603180 analysis@ams-lab.com / www.ams-lab.com



TEST REPORT

Job No./Report No: 20-005246

Date: 26/06/2020

Report unit Bacterial Filtration Efficiency = %
Report unit Number of Bacteria = cfu/mL

A specimen of the mask material is clamped between a impactor and an aerosol chamber. An aerosol of Staphylococcus aureus is introduced into the aerosol chamber and drawn through the mask material and the impactor under vacuum. The bacterial filtration efficiency of the mask is given by the number of colony forming units passing through the medical face mask material expressed as a percentage of the number of colony forming units present in the challenge aerosol.

Test Flow Rate: 28,3 L/min
Test Flow Time: 2 minute
Sample Sizes: 10x10 cm²
Microorganism: Staphylococcus aureus ATCC 6538
Bacterial concentration (cfu/ml): 5x10⁵ cfu/ml
Incubation conditions: 24 hour, 35C ± 2C
Positive control sample average of number of Bacteria (C): 2.8x10³ cfu/ml / 2.12x10³ cfu/ml for sample S-200617-00013

(*) Test subcontracted. Results in subcontracted report number: 20018262

SOP106 - Determination of breathability (Differential Pressure) - Original

ID	ID AMSLab	Description	Conclusion
1	S-200603-00002	FABRIC WHITE (ORIGINAL)	See Results

	CAS	S-200603-00002
Average Differential pressure (Pa/cm ²)		15
Value 1 Differential pressure (Pa/cm ²)		14
Value 2 Differential pressure (Pa/cm ²)		15
Value 3 Differential pressure (Pa/cm ²)		16
Value 4 Differential pressure (Pa/cm ²)		14
Value 5 Differential pressure (Pa/cm ²)		15

Notes:

- Note 1: Applied standard UNE-EN 14683:2019 and Specification UNE 0064-1, 0064-2 and 0065
- Note 2: Size of test specimen: 4.9 cm²
- Note 3: Tested area of the test specimen: 2.5 cm
- Note 4: Flow of air: (8 ± 0.2) l/min
- Note 5: Velocity of 272 l/m²/s or 272 mm/s
- Note 6: Report Unit: Pa and P (Pa/cm²)
- Note 7: Number of measurements: 5
- Note 8: Conditioned samples: 4 hours at 21 ± 5 °C and 85 ± 5 HR
- Note 9: n.a. = not applicable

Requirement by standard:

- Non-reusable Hygienic Mask by UNE 0064-1-2: ≤ 60 Pa/cm²
- Reusable Hygienic Mask by UNE 0065: ≤ 60 Pa/cm²
- European specification CWA 17553:2020: ≤ 70 Pa/cm²

Specific Notes:

- (**) The result is out of specifications

- The laboratory is not responsible for the information received by the client (grey shaded fields)
- Reported results do not include uncertainties (but are available for the customer).
- Opinions and interpretations expressed herein are outside the scope of accreditation.
- Unless otherwise stated the result shown in this test report refer only the sample/s tested and such sample/s are retained for 30 days only.
- Test reports without AMSLab seal and authorized signatures are invalid.
- This document can't be reproduced or modified except in full, without prior given approval of the company.
- Any printed copy of this document is copy from the original digital document.

Applied Mass Spectrometry Laboratory, S.L.U. Avda. Benigno Rivera, nº 66 27003 Lugo (Spain)
Tel.: +34 982609074 - Fax.: +34 982603180 analysis@ams-lab.com / www.ams-lab.com



TEST REPORT

Job No./Report No: 20-005246

Date: 26/06/2020

SOP106 - Determination of breathability (Differential Pressure) - After Washing

ID	ID AMSLab	Description	Conclusion
2	S-200603-00003	FABRIC WHITE (AFTER 20 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
6	S-200617-00011	FABRIC WHITE (AFTER 50 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
10	S-200619-00134	FABRIC WHITE (AFTER 25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00003	S-200617-00011	S-200619-00134
Average Differential pressure (Pa/cm ²)		13	10	11
Value 1 Differential pressure (Pa/cm ²)		12	11	13
Value 2 Differential pressure (Pa/cm ²)		11	9	11
Value 3 Differential pressure (Pa/cm ²)		12	10	11
Value 4 Differential pressure (Pa/cm ²)		11	9	10
Value 5 Differential pressure (Pa/cm ²)		13	9	10

Notes:

Note 1: Applied standard UNE-EN 14683:2019 and Specification UNE 0064-1, 0064-2 and 0065

Note 2: Size of test specimen: 4.9 cm²

Note 3: Tested area of the test specimen: 2.5 cm

Note 4: Flow of air: (8 ± 0.2) l/min

Note 5: Velocity of 272 l/m²/s or 272 mm/s

Note 6: Report Unit: Pa and P (Pa/cm²)

Note 7: Number of measurements: 5

Note 8: Conditioned samples: 4 hours at 21 ± 5 °C and 85 ± 5 HR

Note 9: n.a. = not applicable

Requirement by standard:

- Non-reusable Hygienic Mask by UNE 0064-1-2: ≤ 60 Pa/cm²

- Reusable Hygienic Mask by UNE 0065: ≤ 60 Pa/cm²

- European specification CWA 17553:2020: ≤ 70 Pa/cm²

Specific Notes:

(**) The result is out of specifications

Issue Date: 26/06/2020

Signed: Manuel Lolo



General Manager

Signed: Pablo Perez



Chemical Lab Manager

Signed: Esteban Ramirez



Physical Lab Manager

- The laboratory is not responsible for the information received by the client (grey shaded fields)
- Reported results do not include uncertainties (but are available for the customer).
- Opinions and interpretations expressed herein are outside the scope of accreditation.
- Unless otherwise stated the result shown in this test report refer only the sample/s tested and such sample/s are retained for 30 days only.
- Test reports without AMSLab seal and authorized signatures are invalid.
- This document can't be reproduced or modified except in full, without prior given approval of the company.
- Any printed copy of this document is copy from the original digital document.

Applied Mass Spectrometry Laboratory, S.L.U. Avda. Benigno Rivera, nº56 27003 Lago (Spain)
Tel.: +34 982809974 - Fax.: +34 982803180 analysis@ams-lab.com / www.ams-lab.com

Pag. 5 of 5