

Job No./Report No: 20-005247
Date: 26/06/2020

Code: CL-0838

The following sample was (were) submitted and identified by the client as:

Serie :	Job no Report No.: 20-005247
Batch No.:	Receiving Date: 01/06/2020
Reference No.: TEJIDO TRITEX 7191 NEGRO	Test Start Date: 03/06/2020
Composition indicated: 80%PES,20%PA	Test End Date: 26/06/2020
	Sample description: RAW MATERIAL MASKS

SUMMARY OF TEST CONCLUSIONS

SOP description	Conclusions
SOP305 - Change of appearance after washing (Garments and fabrics)	See Results
SOP 342- Bacterial Filtration Efficiency (BFE)	See Results
SOP 342- Bacterial Filtration Efficiency (BFE) - After Washing	See Results
SOP106 - Determination of breathability (Differential Pressure) - Original	See Results
SOP106 - Determination of breathability (Differential Pressure) - After Washing	See Results

Sample Tested

ART. TRITEX (7191)

Tejido para fabricación de Mascarillas Higiénicas Reutilizables para Adultos y Niños "un solo capa"
Fabric type for production Hygienic and Reusable masks for children and adults « one single layer »

"Cumple con lo indicado en la especificación / Approved according to UNE 0065:2020"

- | | |
|---|---|
| <p>Nuestro Tejido es:</p> <ul style="list-style-type: none"> • Transpirable • Hidrófugo que repele el agua y los microgorgoros • Actúa como barrera para virus y bacterias • Respiratorio con el medio ambiente • Apto para la estampación | <p>Particular specifications:</p> <ul style="list-style-type: none"> • Respirable fabric • Antibacterial & antiviral waterproof properties • Unimproved properties • Respiratory towards the environment • Suitable for printing |
|---|---|

126 gr / m²
80% PES - 20% PA



INFORME DE ENSAYO / TEST REPORT
Cumple UNE 0065 : 2020

2020TM1000

With the Performance Requirements of EN14683:2019+AC:2019
Sobre los requisitos de Rendimiento en base a la norma EN14683:2019+AC:2019

Clase I
Facil
después de
5 lavados



INFORME DE ENSAYO / TEST REPORT
20-005248

European Specification CWA 17553:2020 Level =>90% and Level =>70%
Especificación Europea CWA 17553:2020 Nivel =>90% y Nivel =>70%

BFE % Bacterial Filtration Efficiency Eficacia Filtración bacteriana	>90	84,5 +/- 2,45
Breathability: Differential Pressure (Pa/cm ²) Respirabilidad: Presión Diferencial	< 60	16 +/- 1

50 ciclos 100% 

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

ID	ID AMSLab	Description	Conclusion
3	S-200603-00009	FABRIC BLACK (20 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
7	S-200617-00015	FABRIC BLACK (50 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
10	S-200619-00137	FABRIC BLACK (25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00009	S-200617-00015	S-200619-00137
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-200603-00010	FABRIC BLACK (ORIGINAL)	See Results

	CAS	S-200603-00010
Test 1: Bacterial Filtration Efficiency		92.5
Test 1: Number of Bacteria		210
Test 2: Bacterial Filtration Efficiency		92.8
Test 2: Number of Bacteria		203
Test 3: Bacterial Filtration Efficiency		91.4
Test 3: Number of Bacteria		240
Test 4: Bacterial Filtration Efficiency		90.5
Test 4: Number of Bacteria		265
Test 5: Bacterial Filtration Efficiency		90.0
Test 5: Number of Bacteria		279

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Job No./Report No: 20-005247

Date: 26/06/2020

Notes:

Test Metod 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 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): 5×10^5 cfu/ml

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

Positive control sample average of number of Bacteria (C): 2.8×10^3 cfu/ml

(*) Test subcontracted. Results in subcontracted report number: 20017784

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

ID	ID AMSLab	Description	Conclusion
5	S-200603-00011	FABRIC BLACK (AFTER 20 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
8	S-200617-00016	FABRIC BLACK (AFTER 50 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
11	S-200619-00138	FABRIC BLACK (AFTER 25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00011	S-200617-00016	S-200619-00138
Test 1: Bacterial Filtration Efficiency		85.4	79.5	82.3
Test 1: Number of Bacteria		410	435	485
Test 2: Bacterial Filtration Efficiency		85.6	79.8	82.5
Test 2: Number of Bacteria		403	428	490
Test 3: Bacterial Filtration Efficiency		85.7	80.1	82.8
Test 3: Number of Bacteria		400	421	483
Test 4: Bacterial Filtration Efficiency		85.2	80.4	82.4
Test 4: Number of Bacteria		415	416	494
Test 5: Bacterial Filtration Efficiency		85.0	80.6	82.9
Test 5: Number of Bacteria		419	412	480

Notes:

Test Metod 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 $\geq 70\%$

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TEST REPORT

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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-200617-00016

(*) Test subcontracted. Results in subcontracted report number: 20018265

SOP106 - Determination of breathability (Differential Pressure) - Original

ID	ID AMSLab	Description	Conclusion
1	S-200603-00007	FABRIC BLACK (ORIGINAL)	See Results

	CAS	S-200603-00007
Average Differential pressure (Pa/cm ²)		12
Value 1 Differential pressure (Pa/cm ²)		12
Value 2 Differential pressure (Pa/cm ²)		12
Value 3 Differential pressure (Pa/cm ²)		13
Value 4 Differential pressure (Pa/cm ²)		12
Value 5 Differential pressure (Pa/cm ²)		13

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

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

ID	ID AMSLab	Description	Conclusion
2	S-200603-00008	FABRIC BLACK (AFTER 20 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
6	S-200617-00014	FABRIC BLACK (AFTER 50 WASHING CYCLES AT 60°C)	See Results
ID	ID AMSLab	Description	Conclusion
9	S-200619-00136	FABRIC BLACK (AFTER 25 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200603-00008	S-200617-00014	S-200619-00136
Average Differential pressure (Pa/cm2)		10	9	10
Value 1 Differential pressure (Pa/cm2)		10	9	10
Value 2 Differential pressure (Pa/cm2)		11	8	10
Value 3 Differential pressure (Pa/cm2)		11	9	11
Value 4 Differential pressure (Pa/cm2)		10	9	10
Value 5 Differential pressure (Pa/cm2)		10	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

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