

**Job No./Report No:** 20-005565

**Date:** 01/07/2020

**Client:** Texia Iberica Diseño Textil, S.L.

**Code:** CL-1374

**Address:** Pol. Ind. A Granxa Parcela 260 18B/C PORRIÑO (O) PONTEVEDRA ESPAÑA

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

Job no Report No.: 20-005565

Serie :

Receiving Date: 12/06/2020

Batch No.:

Test Start Date: 12/06/2020

Reference No.: MASCARILLA BLANCA

Test End Date: 30/06/2020

Composition indicated: unknown

Sample description: MASK

This test report is a modification of issued in the date "30/06/2020". Change: Application of the European specification requirements for community face coverings CWA 17553. Cause: Customer's request.

## 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



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

ID	ID AMSLab	Description	Conclusion
3	S-200612-00021	MASK WHITE (20 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200612-00021
Change of appearance after washing		Slight change
Number of cycles		20
Washing Temperature		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-200612-00022	MASK WHITE (ORIGINAL)	See Results

	CAS	S-200612-00022
Test 1: Bacterial Filtration Efficiency		85.6
Test 1: Number of Bacteria		245
Test 2: Bacterial Filtration Efficiency		84.6
Test 2: Number of Bacteria		261
Test 3: Bacterial Filtration Efficiency		83.9
Test 3: Number of Bacteria		274
Test 4: Bacterial Filtration Efficiency		84.5
Test 4: Number of Bacteria		264
Test 5: Bacterial Filtration Efficiency		84.3
Test 5: Number of Bacteria		267

Notes:

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

Specifications applied:

Spanish specification UNE 0065:2020: 90%

European specification CWA 17553:2020: Level 90% and Level 70%

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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 cm<sup>2</sup>

Microorganism:Staphylococcus aureus ATCC 6538

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

Incubation conditions: 24 hour, 35C ± 2C

Positive control sample average of number of Bacteria (C): 1.7x10E3 cfu/ml

(\*) Test subcontracted. Results in subcontracted report number: 20020213

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

ID	ID AMSLab	Description	Conclusion
5	S-200612-00023	MASK WHITE (AFTER 20 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200612-00023
Test 1: Bacterial Filtration Efficiency		84.3
Test 1: Number of Bacteria		267
Test 2: Bacterial Filtration Efficiency		83.8
Test 2: Number of Bacteria		275
Test 3: Bacterial Filtration Efficiency		83.5
Test 3: Number of Bacteria		281
Test 4: Bacterial Filtration Efficiency		83.2
Test 4: Number of Bacteria		286
Test 5: Bacterial Filtration Efficiency		83.0
Test 5: Number of Bacteria		289

Notes:

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

Specifications applied:

Spanish specification UNE 0065:2020: 90%

European specification CWA 17553:2020: Level 90% and Level 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

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Job No./Report No: 20-005565

Date: 01/07/2020

Test Flow Time: 2 minute  
 Sample Sizes: 10x10 cm<sup>2</sup>  
 Microorganism: Staphylococcus aureus ATCC 6538  
 Bacterial concentration (cfu/ml): 5x10<sup>5</sup> cfu/ml  
 Incubation conditions: 24 hour, 35C ± 2C  
 Positive control sample average of number of Bacteria (C): 1.7x10<sup>3</sup> cfu/ml

(\*) Test subcontracted. Results in subcontracted report number: 20020214

**SOP106 - Determination of breathability (Differential Pressure) - Original**

ID	ID AMSLab	Description	Conclusion
1	S-200612-00019	MASK WHITE (ORIGINAL)	See Results

	CAS	S-200612-00019
Average Differential pressure (Pa/cm <sup>2</sup> )		24
Value 1 Differential pressure (Pa/cm <sup>2</sup> )		24
Value 2 Differential pressure (Pa/cm <sup>2</sup> )		24
Value 3 Differential pressure (Pa/cm <sup>2</sup> )		25
Value 4 Differential pressure (Pa/cm <sup>2</sup> )		24
Value 5 Differential pressure (Pa/cm <sup>2</sup> )		23

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 cm<sup>2</sup>
- 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/m<sup>2</sup>/s or 272 mm/s
- Note 6: Report Unit: Pa and P (Pa/cm<sup>2</sup>)
- Note 7: Number of samples tested: 5 / 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/cm<sup>2</sup>
- Reusable Hygienic Mask by UNE 0065: 60 Pa/cm<sup>2</sup>
- European specification CWA 17553:2020: 70 Pa/cm<sup>2</sup>

Specific Notes:

(\*\*) The result is out of specifications

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

ID	ID AMSLab	Description	Conclusion
2	S-200612-00020	MASK WHITE (AFTER 20 WASHING CYCLES AT 60°C)	See Results

	CAS	S-200612-00020
Average Differential pressure (Pa/cm <sup>2</sup> )		38
Value 1 Differential pressure (Pa/cm <sup>2</sup> )		36
Value 2 Differential pressure (Pa/cm <sup>2</sup> )		40
Value 3 Differential pressure (Pa/cm <sup>2</sup> )		39

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	CAS	S-200612-00020
Value 4 Differential pressure (Pa/cm2)		38
Value 5 Differential pressure (Pa/cm2)		37

**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 cm<sup>2</sup>

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/m<sup>2</sup>/s or 272 mm/s

Note 6: Report Unit: Pa and P (Pa/cm<sup>2</sup>)

Note 7: Number of samples tested: 5 / 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/cm<sup>2</sup>

- Reusable Hygienic Mask by UNE 0065: 60 Pa/cm<sup>2</sup>

- European specification CWA 17553:2020: 70 Pa/cm<sup>2</sup>

**Specific Notes:**

(\*\*) The result is out of specifications

Issue Date: 01/07/2020

Signed: Manuel Lolo



General Manager

Signed: Pablo Perez



Chemical Lab Manager

Signed: Esteban Ramirez



Physical Lab Manager

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