

CONFORMITY TO TYPE BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED PRODUCT CHECKS AT RANDOM INTERVALS (MODULE C2)

MODÜL C2 - ÜRETİMİN DÂHİLÎ KONTROLÜ VE ÜRÜNÜN RASTGELE ARALIKLARLA DENETİMLİ MUAYENESİNE DAYALI TİPE UYGUNLUK

Belge No / Certificate No : 40091178

Belgelendirme Tarihi - Bir Sonraki Belge Tarihi /

Certification Date / Certificate Validity Date : 27.11.2023-27.11.2024

Belge Geçerlilik Tarihi / Document Validity Period : 1 yıl / 1 year

Firma Unvanı ve Adresi /

Company Name and Address : PHARMAPLAST S.A.E

Address-1: Amria free zone 23512, Alexandria Egypt.

Address-2: Part number 2, block 7, third industrial zone, Borg el Arab, Alexandria, Egypt. Address-3: KRE LTD, "Pharmaplast group", Industrial Area, 2830Katunsi, Sandanski, Bulgaria.

Marka / Model / Brand / Model : FC-F2E

Direktifi / Directive : 2016/425 REGULATION

Modülü/Kategori / Module / Category : C2 MODÜLÜ/ KATEGORİ III

MODULE C2 / CATEGORY III

Teknik Değerlendirme Rapor No/

Technical Evaluation Report No : 40091178

Ürün Tipi / Product Type:

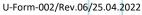
- EN 149:2001+ A1:2009 Solunumla ilgili koruyucu cihazlar - Parçacıklara karşı koruma amaçlı filtreli yarım maskeler/ *Respiratory protective devices - Filtering half masks to protect against particles*

Ürünün Malzeme Bilgisi / *Product Material Information*: FC-F2E model ürünleri kumaş, elastik kayış, burun klipsi ve filtre katmanı kullanılarak imal edilmiştir./ FC-F2E model products are manufactured using fabric, elastic strap, nose clip, filter layer.

Karar Verici / Approver Şirket Müdürü / General manager



MNA Laboratuvarları San. Tic.Ltd .Şti Adres: Küçükbakkalköy Mahallesi Yenidoğan Cad.No:21 Ataşehir/İstanbul Tel: 0216 574 07 08 Faks: 0216 575 13 31 www.mnalab.com



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CONFORMITY TO TYPE BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED PRODUCT CHECK AT RANDOM INTERVALS (MODULE C2. ANNEX VII) (40091178)

Notified Body Number: 2841 (MODULE C2, ANNEX VII) (40091178)

Report No : 40091178

Report Date : 27.11.2023

Application No : 40091178

1. COMPANY INFORMATION:

PHARMAPLAST S.A.E

Address-1: Amria free zone 23512, Alexandria Egypt.

Address-2: Part number 2, block 7, third industrial zone, Borg el Arab, Alexandria, Egypt. Address-3: KRE LTD, "Pharmaplast group", Industrial Area, 2830Katunsi, Sandanski, Bulgaria.

2. PPE INFORMATION:

Disposable and non-sterile half mask made of particulate protection fitler material.

3. PPE TYPE IDENTIFICATION

EN 149:2001+A1:2009 Respiratory protective devices – Filtering half masks to protect against particles - Requirements, testing, marking

4. PPE PICTURES



FC-F2E (Red, Pink, Blue, Green, Grey, Black, White)

5. PPE DIMENSIONS:

FC-F2E model has been found to be produced using standard size.

6. PPE PRODUCT MATERIAL INFORMATION:

The mask is made of elastic strap, nonwoven fabric on the outer and inner layers and fitler material on the middle layer.



CONFORMITY TO TYPE BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED PRODUCT **CHECK AT RANDOM INTERVALS** (MODULE C2, ANNEX VII) (40091178) Notified Body Number: 2841

7. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

- A visual inspection was made according to EN 149:2001 +A1:2009 for ergonomics.
- Protection levels and degrees are defined by the manufacturer.
- Suitable construction materials were determined by visual inspection according to EN 149:2001 +A1:2009.

8. ANALYSIS EVALUATION AND MARKING:

EN 149:2001 +A1:2009

TESTS	PARAMETER	PARAMETER PERFORMANCE		RESULTS	PERFORMANC	EVALUATIO		
		LEVELS	3			E LEVELS	N	
		FFP1	FFP2	FFP3				
Part 7.3	Shall also the marking	g and th	e infor	mation	Appropriate	-	PASS	
Visual	supplied by the manu	facturer						
inspection								
Banned Azo	< 30 mg/kg				<5	-	PASS	
Dyes								
Part 7.4	Particle filtering half				Appropriate	-	PASS	
Packaging	for sale packaged in su		-	•				
	•	echanical damage and						
	contamination before	e use.						
Part 7.5	When conditioned in				Appropriate	-	PASS	
Material	8.3.2 the particle filter	er half r	nask sh	all not				
	collapse.							
Part 7.6	After cleaning and dis	-			Not applicable	-	Not	
Cleaning and	particle filtering half			-			applicable	
disinfecting	penetration requiren	nent of	the re	elevant				
	class.							
Part 7.7	No negative commen	nts should be made by			Appropriate	-	PASS	
Practical	the test subject regard	ding any of the criteria						
performance	evaluated.							
Part 7.8	Parts of the device	-			Appropriate	-	PASS	
Finish of parts	contact with the wear	er shall	have no	o sharp				
	edge or burrs.							

TESTS	PARAMETER	PERFORMANCE		CE	RESULTS	PERFORMANCE	EVALUATION
		LEVELS	LEVELS			LEVELS	
		FFP1	FFP2	FFP3			
Part 7.9.1	At least 46 out of	≤25	≤11	≤5	See the table	FFP2	PASS
Total inward	the 50 individual			<i>a</i>	below		
leakage	exercise result			7			
	At least 8 out of the	≤22	≤8	≤2	See the table	FFP2	PASS
1	10 individual wearer		100		below		
	arithmetic means		200				

Total Inward Leakage (%)

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CONFORMITY TO TYPE BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED PRODUCT CHECK AT RANDOM INTERVALS

Notified Body Number: 2841 (MODULE C2, ANNEX VII) (40091178)

Notified body Nulliber, 2041	(11102012 02) / 111112 / 111/ (100322/0)									
	Exercise	Exercise	Exercise	Exercise	Exercise	Average				
	1	2	3	4	5					
Subject 1 (As received)	4,6	4,8	5,0	5,2	4,4	4,8				
Subject 2 (As received)	4,4	4,3	4,1	3,4	3,5	3,9				
Subject 3 (As received)	4,3	3,4	5,0	4,2	4,0	4,2				
Subject 4 (As received)	3,0	3,1	3,9	2,7	2,2	3,0				
Subject 5 (As received)	3,4	3,5	3,5	2,9	3,6	3,4				
Subject 6 (After temperature										
conditioning)	5,3	4,9	5,0	4,6	5,0	5,0				
Subject 7 (After temperature										
conditioning)	2,9	2,4	2,3	2,4	2,6	2,5				
Subject 8 (After temperature										
conditioning)	3,9	4,0	4,6	4,7	4,4	4,3				
Subject 9 (After temperature										
conditioning)	4,1	3,3	3,7	3,3	3,2	3,5				
Subject 10 (After temperature										
conditioning)	4,8	4,4	4,8	6,1	4,9	5,0				

Subject facial dimensions

Subject	Face Length	Face Width	Face Depth	Mouth Width
	(mm)	(mm)	(mm)	(mm)
1	120	145	105	61
2	128	155	112	68
3	110	128	105	55
4	123	140	133	57
5	116	128	99	58
6	120	130	91	56
7	138	151	119	65
8	110	130	96	55
9	120	131	85	58
10	135	142	125	83

TESTS	PARAMETER	PERFC	PERFORMANCE		RESULTS	PERFORMANCE	EVALUATION
		LEVEL	LEVELS			LEVELS	
		FFP1	FFP2	FFP3			
Part 7.9.2	Sodium chloride, 95	% 20	% 6	% 1	See the table	FFP2	PASS
Penetration	L/min				below		
of filter	%, max						
material	Paraffin oil, 95 L/min	% 20	% 6	% 1	See the table	FFP2	PASS
	%, max	N-		1/	below		

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
As received	0,5	0,6
As received	0,5	0,7
As received	0,3	0,4
After the simulated wearing treatment	0,4	0,7
After the simulated wearing treatment	0,5	0,6
After the simulated wearing treatment	0,4	0,8



PRODUCTION CONTROL PLUS SUPERVISED PRODUCT CHECK AT DANICOS

(MODULE C2, ANNEX VII) (40091178)

Notified Body Number: 2841 (MODULE C2, ANNE	X VII) (40091178)	
Mechanical strength and temperature conditioning (120mg)	2,9	3,8
Mechanical strength and temperature conditioning (120mg)	2,8	3,6
Mechanical strength and temperature conditioning (120mg)	2,9	3,9

TESTS	PARAMETER	PERFORMANCE F LEVELS		RESULTS	PERFORMANCE LEVELS	EVALUATION	
		FFP1	FFP2	FFP3			
Part 7.10	Materials shall not be known to be likely to				Appropriate	-	PASS
Compatibility	cause irritation or any	other a	adverse	effect to			
with skin	health						
Part 7.11	Mask shall not burn o	r not to	continu	e to burn	Flame not	-	PASS
Flammibility	for more than 5 s				seen		
Part 7.12	Shall not exceed an average of % 1				0,49	-	PASS
Carbondioxide					0,52		
content of the					0,53		
inhalation air							
Part 7.13	It can be donned and	remove	d easily	/	Appropriate	-	PASS
Head harness							
Part 7.14	The field of vision sha	II accep	table in	practical	Appropriate	-	PASS
Field of vision	performance test.						
Part 7.15	It shall withstand axia	ally a te	nsile fo	rce of 10	Not applicable	-	Not
Exhalation	N apply for 10 s.						applicable
valve(s)	If fitted, shall contin		-	•			
	after a continuous		on flow	v of 300			
	L/min over a period o	f 30 s.					

TESTS	PARAMETER	PERFORMANCE LEVELS		E	RESULTS	PERFORMANCE LEVELS		EVALUATION
		FFP1	FFP2	FFP3	-			
Part 7.16	Inhalation 30L/min	0,6	0,7	1,0	See the table	FFP:	2	PASS
Breathing		mbar	mbar	mbar	below			
Resistance	Inhalation 95L/min	2,1	2,4	3,0	See the table	FFP:	2	PASS
		mbar	mbar	mbar	below			
	Exhalation	3,0	3,0	3,0	See the table	FFP:	2	PASS
	160L/min	mbar	mbar	mbar	below			
Breathing Resis	stance (mbar)			Inhala	tion 30L/min		Inhalation 9	5L/min
As received				0,5			1,7	
As received				0,5			1,7	
As received				0,4			1,7	
After temperati	ure conditioning			0,5			1,6	
After temperati	ure conditioning		. 10	0,5			1,6	
After temperati	ure conditioning			0,4			1,6	
After the simula	ated wearing treatmen	t		0,4			1,6	
After the simula	ated wearing treatmen			0,5			1,7	
After the simula	ated wearing treatmen	t 🔍	- 'VA.	0,5			1,6	

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Notified Body Number: 2841 (MODULE C2, ANNEX VII) (40091178)

Breathing Resistance 160L/min (mbar)	Facing directly ahead	Facing vertically upwards	Facing vertically downwards	Lying on the left side	Lying on the right side
As received	2,8	2,7	2,8	2,7	2,8
As received	2,7	2,7	2,7	2,7	2,7
As received	2,8	2,8	2,8	2,8	2,7
After temperature conditioning	2,8	2,8	2,7	2,8	2,8
After temperature conditioning	2,8	2,8	2,7	2,7	2,7
After temperature conditioning	2,8	2,8	2,8	2,8	2,8
After the simulated wearing treatment	2,8	2,8	2,8	2,8	2,8
After the simulated wearing treatment	2,7	2,7	2,7	2,7	2,7
After the simulated wearing treatment	2,8	2,7	2,8	2,7	2,8

TESTS	PARAMETER			RESULTS	PERFORMANCE	EVALUATION	
		LEVEL	S			LEVELS	
		FFP1	FFP2	FFP3			
Part 7.17	After clogging the	4	5	7	Not applicable	-	Not applicable
Clogging	inhalation	mba	mba	mbar			
	resistances shall	r	r				
	not exceed.						
	(valved)						
	The exhalation resist	ance sh	all not	exceed	Not applicable	-	Not applicable
	3 mbar at 160 L/ r	min cor	ntinuous	s flow.			
	(valved)		ı	1			
	After clogging the		4	5	Not applicable	-	Not applicable
	inhalation and	mba	mba	mbar			
	exhalation	r	r				
	resistances shall						
	not exceed.						
	(valveless)						
Part 7.18	All demountable par	-	-		Not applicable	-	Not applicable
Demountable	readily connected possible by hand.	and s	ecurea	were			
part Part 9	The packaging inform	aation (hall bo	cloarly	Appropriate	_	PASS
Marking	and durably marke			•	Appropriate	-	PASS
Ividiking	commercially avail						
	legible through it		_	_			
	transparent.		Pacitae	J 9			

9. ATTACHMENTS

• Test Reports (M-2023-0577,M-2023-0573)

CONTROLLER :

SIGNATURE :

DATE :





AB-1183-T

M-2023-0573

11-23

Report Nu. : M-2023-0573 Date : 2023-11-10 10:54:55 Page : 1 / 3 Rev:

Purpose of Analysis : Special request

Sample Send Org. : Pharmaplast SAE

Address : Amria Free Zone, 23512, Akexandria, Egypt

Sample Acceptance Date : 2023-09-20 08:14:03

Analysis Date : 2023-09-20 13:41:17

Sample Quantity : 24 Pieces

Sample Description : Pharmaplast FC-F2E

Other informations :

Tests	Method	Expected performance level	Evaluation
Banned Azo Dyes	EN ISO 14362-1 / EN ISO 17234-1		PASS

Banned Azo Dyes *

Device:GC-MS

Measurement uncertainty: Textile:±0,350 Leather:±0,390

2-naphthylamine/91-59-8, o-aminoazotoluene, 4-amino-2',3-dimethylazobenzene, 4-o-tolylazo-o-toluidine/97-56-3, 5-nitro-o-toluidine/99-55-8, 4-chloroaniline/106-47-8, 4-methoxy-m-phenylenediamine/615-05-4, 4,4'-methylenedianiline, 4,4'-diaminodiphenylmethane/101-77-9, 3,3'-dichlorobenzidine, 3,3'-dichlorobiphenyl-4,4'-ylenediamine/91-94-1, 3,3'-dimethoxybenzidine, o-dianisidine/119-90-4, 3,3'-dimethylbenzidine, 4,4'-bi-o-toluidine/119-93-7, 4,4'-methylenedia-o-toluidine/838-88-0, 6-methoxy-m-toluidine p-cresidine/120-71-8, 4,4'-methylene-bis-(2-chloro-aniline), 2,2'-dichloro-4,4'-methylene-dianiline/101-14-4, 4,4'-oxydianiline/101-80-4, 4,4'-thiodianiline/139-65-1, o-toluidine, 2-aminotoluene/95-53-4, 4-methyl-m-phenylenediamine/95-80-7, 2,4,5-trimethylaniline/137-17-7, o-anisidine, 2-methoxyaniline/90-04-0, 4-amino azobenzene/60-09-3

Compounds/Cas No: biphenyl-4-ylamine, 4-aminobiphenyl xenylamine/92-67-1, benzidine/92-87-5, 4-chloro-o-toluidine/95-69-2,

Tests	Analysis result	Limit Value	Method	Evaluation	Physical Condition
Banned Azo Dyes	Check the table for results.	≤30 mg/kg	EN ISO 14362-1 / EN ISO 17234-1	PASS	-

Part of Sample	Results(mg/kg)
Grey Elastic Fabric+Red Fabric+Red Elastic Fabric,Green Fabric+Green Elastic Fabric+Blue Fabric,Blue Elastic Fabric+Pink Elastic Fabric+Pink Fabric,Black Fabric+Black Elastic Fabric+Grey Fabric	<5

CAS No	Substances
92-67-1	4-aminobiphenyl
92-87-5	Benzidine
95-69-2	4-chloro-o-toluidine





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M-2023-0573

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91-59-8		2-naphthylamine	2-naphthylamine		
97-56-3		o-aminoazotoluene	o-aminoazotoluene		
99-55-8		5-nitro-o-toluidine			
106-47-8		4-chloroaniline			
615-05-4		2,4-diaminoanisole			
101-77-9		4,4-methylenedianiline			
91-94-1		3,3-dichlorobenzidine			
119-90-4		3,3-dimethoxybenzidine			
119-93-7		3,3-dimethylbenzidine			
838-88-0		4,4-methylenediotoluidine			
120-71-8		p-cresidine			
101-14-4		2,2-dichloro-4,4-methylene-dia	2,2-dichloro-4,4-methylene-dianiline		
101-80-4		4,4-oxydianiline			
139-65-1		4,4-thiodianiline	4,4-thiodianiline		
95-53-4		o-toluidine			
95-80-7		2,4-diaminotoluene	2,4-diaminotoluene		
137-17-7		2,4,5-trimethylaniline			
90-04-0		o-anisidine			
60-09-3		4-aminoazobenzene			





AB-1183-T

M-2023-0573

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Operating as a test laboratory, MNA Laboratories is accredited by TÜRKAK according to AB-1183-T and TS_EN_ISO/IEC_17025:2017 standards has been done. A multilateral agreement with the European Accreditation Association (EA) on the recognition of the Turkish Accreditation Agency (TÜRKAK) test reports and It has signed a mutual recognition agreement with the International Laboratory Accreditation Association (ILAC).

*The analysis is within the scope of accreditation.

- 1. No part of this analysis report may be used alone or separately and may be partially copied or reproduced without the written permission of the laboratory. It cannot be reproduced, used by third parties or as a means of advertising.
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- 4. This analysis report cannot be used in judicial-administrative proceedings or for advertising purposes.
- 5. Results are valid for the sample received.
- 6. The decision rule is the rule that determines how measurement uncertainty is taken into account when specifying compliance with an established specification. The customer may choose to apply and/or not apply the decision rule (except in cases where legislation/standards are mandatory). If the customer prefers to apply the decision rule; According to the TLM-052 Decision Rule Application instruction published on the www.mnalab.com website, the decision rule selected in agreement is applied and reported by stating the relevant analysis and decision rule method in the "Note" section. If the customer leaves the decision rule application to the laboratory's evaluation, MNA LABORATORIES applies the simple decision rule.
 7. Limit Values are determined by taking from analysis methods.
- 8. The laboratory is not responsible if the information provided by the CUSTOMER affects the validity of the results.
- 9. Test and / or measurement results, expanded measurement uncertainties (if any) and test methods are given in the following pa ges, which are the supplementary part of this certificate.
- . 10. Water Repellency Determination Hydrostatic Pressure Determination T S ISO 811 (Hydrostatic Pressure Tester E / N: 53) Analysis, Seam Strength EN ISO 13935-2 (Strength Test Device E / N: 50) Analysis and resistance to liquid chemical permeation TS EN 659 -A1 Part 3.18 (Liquid Chemical Transfer Device E / N: 107) Analysis is carried out in the conditioning room and ISO 139 PART 3.2 conditions (23 \pm 2 $^{\circ}$ C temperature and 50 \pm 4% relative humidity) are applied for ambient conditions.

Selin Gergin

Sample Acceptance and Reporting Officer

2023-11-10 10:54:07

Erhan Üstünel

Laboratory Responsible

2023-09-28 18:28:52

VOLKAN AKIN

Laboratory Manager

2023-11-10 10:54:36

FRM:23/rev.06/27.10.2023



Report Nu. : M-2023-0577 Date : 2023-11-07 13:44:10 Page : 1 / 6 Rev:

Purpose of Analysis : Special request

Sample Send Org. : Pharmaplast SAE

Address : Amria Free Zone, 23512, Akexandria, Egypt

Sample Acceptance Date : 2023-09-20 08:14:34

Analysis Date : 2023-09-20 13:52:16

Sample Quantity : 120 Pieces

Sample Description : Pharmaplast FC-F2E

Other informations :

Tests	Method	Expected performance level	Evaluation
Flammability	EN 13274-4	-	PASS
Breathing Resistance	EN 149+A1 Part 8.9	-	PASS (FFP2)
Total Inward Leakage	EN 149+A1 Part 8.5	-	PASS (FFP2)
Carbon Dioxide Content Of The Inhalation Air	EN 149+A1 Part 8.7	-	PASS
Penetration Of Filter Material	EN 149+A1 Part 8.11, EN 13274-7	-	PASS (FFP2)

Flammability

Device: Flammability tester

Measurement uncertainty:-

Tests	Analysis result	Limit Value	Method	Evaluation	Physical Condition
Flammability	No flame seen.	Shall not burn for more than 5 sec after removal from the flame	EN 13274-4	PASS	-

Breathing Resistance

Device:Breathing Resistance Tester

Measurement uncertainty: Inhalation 30L/min:±0,160,Inhalation30 L/min:±0,026 Exhalation 160 L/min:0,046

Tests	Analysis result	result Limit Value Method		Evaluation	Physical Condition
Breathing Resistance	Check the table.	See the limits table.	EN 149+A1 Part 8.9	PASS (FFP2)	-



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Classification	30 L/min max basınç (mbar)	95 L/min max basınç (mbar)	160 L/min max basınç (mbar)
FFP1	0,6	2,1	3,0
FFP2	0,7	2,4	3,0
FFP3	1,0	3,0	3,0

Inhalation	30 L/min	95 L/min		
As received 1	0,5	1,7		
As received 2	0,5	1,7		
As received 3	0,4	1,7		
After temperature conditioning 1	0,5	1,6		
After temperature conditioning 2	0,5	1,6		
After temperature conditioning 3	0,4	1,6		
After the simulated wearing treatment 1	0,4	1,6		
After the simulated wearing treatment 2	0,5	1,7		
After the simulated wearing treatment 3	0,5	1,6		
After the flow conditioning 1	-	-		
After the flow conditioning 2	-	-		
After the flow conditioning 3				

Exhalation 160L/min	Facing directly ahead	Facing vertically upwards	Facing vertically downwards	Lying on the left side	Lying on the right side
As received 1	2,8	2,7	2,8	2,7	2,8
As received 2	2,7	2,7	2,7	2,7	2,7
As received 3	2,8	2,8	2,8	2,8	2,7
After temperature conditioning 1	2,8	2,8	2,7	2,8	2,8
After temperature conditioning 2	2,8	2,8	2,7	2,7	2,7
After temperature conditioning 3	2,8	2,8	2,8	2,8	2,8
After the simulated wearing treatment 1	2,8	2,8	2,8	2,8	2,8
After the simulated wearing treatment 2	2,7	2,7	2,7	2,7	2,7
After the simulated wearing treatment 3	2,8	2,7	2,8	2,7	2,8
After the flow conditioning 1	-	-	-	-	-



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After the flow conditioning 2	-		-	-	-		-
After the flow conditioning 3							

Total Inward Leakage

Device: Total Inward Leakage Tester Measurement uncertainty:±0,090

Tests	Analysis result	Limit Value	Method	Evaluation	Physical Condition
Total Inward Leakage	Check the table.	See the limits table.	EN 149+A1 Part 8.5	PASS (FFP2)	-

	At least 46 out of the 50 individual exercise result shall be not greater than	At least 8 out of the 10 individual wearer arithmetic means shall be not greater than
FFP1	≤25	≤22
FFP2	≤11	≤8
FFP3	≤5	≤2

	I					
	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average
Subject 1 (As received)	4,6	4,8	5,0	5,2	4,4	4,8
Subject 2 (As received)	4,4	4,3	4,1	3,4	3,5	3,9
Subject 3 (As received)	4,3	3,4	5,0	4,2	4,0	4,2
Subject 4 (As received)	3,0	3,1	3,9	2,7	2,2	3,0
Subject 5 (As received)	3,4	3,5	3,5	2,9	3,6	3,4
Subject 6 (After temperature conditioning)	5,3	4,9	5,0	4,6	5,0	5,0
Subject 7 (After temperature conditioning)	2,9	2,4	2,3	2,4	2,6	2,5
Subject 8 (After temperature conditioning)	3,9	4,0	4,6	4,7	4,4	4,3
Subject 9 (After temperature conditioning)	4,1	3,3	3,7	3,3	3,2	3,5
Subject 10 (After temperature	4,8	4,4	4,8	6,1	4,9	5,0



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conditioning)			

Carbon Dioxide Content Of The Inhalation Air

Device:Carbon DioxideTester

Measurement uncertainty:±0,072

Tests	Analysis result	Limit Value	Method	Evaluation	Physical Condition
Carbon Dioxide Content Of The Inhalation Air	Check the table.	Maximum %1	EN 149+A1 Part 8.7	PASS	-

	CO2 (%)
Sample 1	0,49
Sample 2	0,52
Sample 3	0,53

Penetration Of Filter Material

Device:Filter Test System

Measurement uncertainty:±0,080

Tests	Analysis result	Limit Value	Method	Evaluation	Physical Condition
Penetration Of Filter Material	Check the table.	FFP1≤20 FFP2≤6 FFP3≤1	EN 149+A1 Part 8.11, EN 13274-7	PASS (FFP2)	-

	Sodium Chloride (%)	Paraffin Oil (%)
As received 1	0,5	0,6
As received 2	0,5	0,7
As received 3	0,3	0,4
After the simulated wearing treatment 1	0,4	0,7
After the simulated wearing treatment 2	0,5	0,6
After the simulated wearing treatment 3	0,4	0,8
Mechanical strength and temperature conditioning (120 mg) 1	2,9	3,8
Mechanical strength and temperature conditioning (120 mg) 2	2,8	3,6



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Mechanical strength and temperature	2,9	3,9	



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Operating as a test laboratory, MNA Laboratories is accredited by TÜRKAK according to AB-1183-T and TS_EN_ISO/IEC_17025:2017 standards has been done. A multilateral agreement with the European Accreditation Association (EA) on the recognition of the Turkish Accreditation Agency (TÜRKAK) test reports and It has signed a mutual recognition agreement with the International Laboratory Accreditation Association (ILAC).

*The analysis is within the scope of accreditation.

- 1. No part of this analysis report may be used alone or separately and may be partially copied or reproduced without the written permission of the laboratory. It cannot be reproduced, used by third parties or as a means of advertising.
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 7. Limit Values are determined by taking from analysis methods.
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- 9. Test and / or measurement results, expanded measurement uncertainties (if any) and test methods are given in the following pa ges, which are the supplementary part of this certificate.
- . 10. Water Repellency Determination Hydrostatic Pressure Determination T S ISO 811 (Hydrostatic Pressure Tester E / N: 53) Analysis, Seam Strength EN ISO 13935-2 (Strength Test Device E / N: 50) Analysis and resistance to liquid chemical permeation TS EN 659 -A1 Part 3.18 (Liquid Chemical Transfer Device E / N: 107) Analysis is carried out in the conditioning room and ISO 139 PART 3.2 conditions (23 \pm 2 $^{\circ}$ C temperature and 50 \pm 4% relative humidity) are applied for ambient conditions.

Selin Gerain

Sample Acceptance and Reporting Officer

2023-11-07 13:43:43

VOLKAN AKIN

Laboratory Manager

2023-11-07 13:17:16

Erhan Üstünel

Laboratory Responsible

2023-11-07 13:16:07