

TECHNICAL EVALUATION REPORT (80111439)

Report No

: 80111439

Report Date

: 16.11.2022

Application No

:80111439

1. COMPANY INFORMATION:

LindenCare GmbH

Head Office: Pempelforter Str. 50, 40211 Düsseldorf Germany

Factory: Beşyol Mahallesi Karadeniz Sokak Polaris Tekstil Blok No 4 İç kapı no 4 Küçükçekmece/ İstanbul

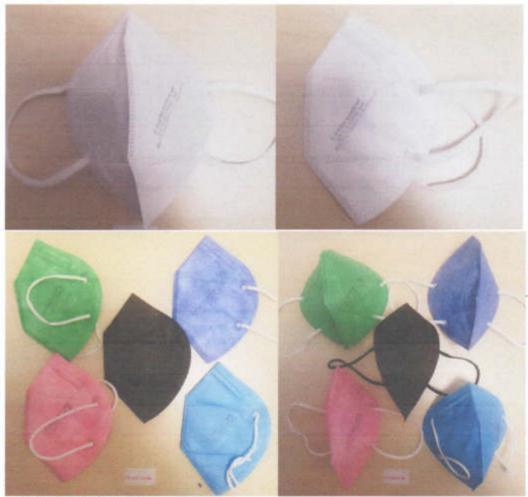
2. PPE INFORMATION:

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



LINDENPARTNER LP1-5

5. PPE DIMENSIONS:

LINDENPARTNER LP1-5 model has been found to be produced using standard size.



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6. PPE PRODUCT MATERIAL INFORMATION:

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

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	PERFO	ORMAN S	CE	RESULTS	PERFORMANCE LEVELS	EVALUATION	
		FFP1	FFP2	FFP3				
Part 7.3 Visual Inspection	Shall also the marking and the information supplied by the manufacturer				Appropriate	5	PASS	
Banned Azo Dyes	< 30 mg/kg	mg/kg			Not applicable	-	Not applicable	
Part 7.4 Packaging	Particle filtering half mask shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use.				Appropriate	-	PASS	
Part 7.5 Material		When conditioned in accordance 8.3.1 & 3.3.2 the particle filter half mask shall not			Appropriate	-	PASS	
Part 7.6 Cleaning and disinfecting	After cleaning and disinfecting the re- usable particle filtering half mask shall satisfy the penetration requirement of the relevant class.			k shall	Not applicable		Not applicable	
Part 7.7 Practical performance	Charles and the second	o negative comments should be made by ne test subject regarding any of the criteria valuated.			Appropriate		PASS	
Part 7.8 Finish of parts	Parts of the device likely to come into contact with the wearer shall have no sharp edge or burrs.			Appropriate		PASS		

TESTS	PARAMETER PERFORMANCE LEVELS		RESULTS	PERFORMANCE LEVELS	EVALUATION		
		FFP1	FFP2	FFP3			
Part 7.9.1 Total inward leakage	At least 46 out of the 50 individual exercise result	≤25	≤11	≤5	See the table below	FFP2	PASS
	At least 8 out of the 10 individual wearer arithmetic means	≤22	≤8	≤2	See the table below	FFP2	PASS



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	Total Inward Leakage (%)										
	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average					
Subject 1 (As received)	4.7	5.0	4.9	5.5	4.8	5.0					
Subject 2 (As received)	5.5	5.4	4.8	4.9	5.6	5.2					
Subject 3 (As received)	5.0	5.4	5.0	5.0	5.0	5.1					
Subject 4 (As received)	4.9	5.0	4.9	5.5	5.6	5.2					
Subject 5 (As received)	5.5	4.8	5.0	5.1	5.0	5.1					
Subject 6 (After temperature conditioning)	5.0	5.0	4.9	5.5	4.9	5.1					
Subject 7 (After temperature conditioning)	5.6	5.1	5.2	6.1	6.3	5.7					
Subject 8 (After temperature conditioning)	5.6	5.3	5.6	4.8	4.8	5.2					
Subject 9 (After temperature conditioning)	5.0	4.9	5.0	4.7	5.0	4.9					
Subject 10 (After temperature conditioning)	5.1	5.0	4.8	4.9	4.9	4.9					

COLOR

Total Inward Leakage (%)										
	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average				
Subject 1 (As recieved)	7.9	6.9	6.1	8.1	6.4	7.1				
Subject 2 (As recieved)	7.6	5.2	5.7	6.4	6.3	6.2				
Subject 3 (As recieved)	7.3	8.5	5.8	8.1	8.5	7.6				
Subject 4 (As recieved)	7.2	7.9	7.7	8.2	8.5	7.9				
Subject 5 (As recieved)	7.0	8.2	7.6	5.3	7.1	7.0				
Subject 6 (After temperature conditioning)	7.3	7.6	5.8	6.4	8.6	7.1				
Subject 7 (After temperature conditioning)	7.3	7.5	7.2	6.2	7.1	7.1				
Subject 8 (After temperature conditioning)	7.4	8.5	7.0	7.1	7.3	7.5				
Subject 9 (After temperature conditioning)	6.0	8.5	8.5	8.1	8.7	8.0				
Subject 10 (After temperature conditioning)	7.9	7.7	7.9	7.2	6.2	7.4				

Subject facial dimensions

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (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



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9	120	131	85	58	
10	135	142	125	83	

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

Color

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
As received	3.5	3.7
As received	3.6	3.7
As received	3.5	3.6
After the simulated wearing treatment	3.4	3.9
After the simulated wearing treatment	3.8	3.7
After the simulated wearing treatment	3.6	3.8
Mechanical strength and temperature conditioning (120 mg)	5.2	5.5
Mechanical strength and temperature conditioning (120 mg)	5.3	5.4
Mechanical strength and temperature conditioning (120 mg)	5.4	5.6

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
As recieved	3.0	3.0
As recieved	3.7	3.5
As recieved	3.9	3.4
After the simulated wearing treatment	3.7	3.3
After the simulated wearing treatment	3.4	3.4
After the simulated wearing treatment	3.9	3.3
Mechanical strength and temperature conditioning	3.1	3.5
Mechanical strength and temperature conditioning	3.6	3.3
Mechanical strength and temperature conditioning	3.7	3.5

TESTS	PARAMETER PERFORMANCE LEVELS				RESULTS	PERFORMANCE LEVELS	EVALUATION	
		FFP1	FFP2	FFP3				
Part 7.10 Compatibility with skin	Materials shall not cause irritation or health			1.5	Appropriate	-	PASS	
Part 7.11 Flammibility	Mask shall not burn for more than 5 s	t burn or not to continue to burn			Flame not seen	-	PASS	
Part 7.12 Carbondioxide content of the inhalation air	Shall not exceed ar	t exceed an average of % 1			0,71 0,73 0,76 Color 0,60 0,67	-	PASS	



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		0,63		
Part 7.13 Head harness	It can be donned and removed easily	Appropriate	-	PASS
Part 7.14 Field of vision	The field of vision shall acceptable in practical performance test.	Appropriate	-	PASS
Part 7.15 Exhalation valve(s)	It shall withstand axially a tensile force of 10 N apply for 10 s. If fitted, shall continue to operate correctly after a continuous exhalation flow of 300 L/min over a period of 30 s.	Not applicable		Not applicable

TESTS PARAMETER	PARAMETER	PERFORMANCE LEVELS		RESULTS	PERFORMANCE LEVELS	EVALUATION	
	FFP1	FFP2	FFP3				
Part 7.16 Inhalation 30L/min Breathing	0,6 mbar	0,7 mbar	1,0 mbar	See the table below	FFP2	PASS	
Resistance	Inhalation 95L/min	2,1 mbar	2,4 mbar	3,0 mbar	See the table below	FFP2	PASS
Exhalation 160L/min		3,0 mbar	3,0 mbar	3,0 mbar	See the table below	FFP2	PASS

Breathing Resistance (mbar)	Inhalation 30L/min	Inhalation 95L/min
As received	0.4	0.9
As received	0.4	0.8
As received	0.3	0.8
After temperature conditioning	0.3	0.8
After temperature conditioning	0.4	0.9
After temperature conditioning	0.3	0.8
After the simulated wearing treatment	0.3	0.9
After the simulated wearing treatment	0.3	0.8
After the simulated wearing treatment	0.4	0.9

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	2,1	2,1	2,1	2,1	2,1
As received	2,2	2,1	2,1	2,1	2,1
As received	2,1	2,1	2,1	2,1	2,1
After temperature conditioning	2,2	2,1	2,2	2,1	2,1
After temperature conditioning	2,2	2,1	2,1	2,2	2,1
After temperature conditioning	2,2	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,2	2,2	2,2	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,2	2,2	2,2
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1

Color

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 recieved	2,1	2,1	2,1	2,0	2,0



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As recieved	2,1	2,1	2,1	2,1	2,1
As recieved	2,0	2,1	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,0	2,0	2,1

Color

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 recieved	2,1	2,1	2,1	2,0	2,0
As recieved	2,1	2,1	2,1	2,1	2,1
As recieved	2,0	2,1	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,0	2,0	2,1

TESTS	PARAMETER	PERF	ORMAN S	CE	RESULTS	PERFORMANCE LEVELS	EVALUATION
		FFP1	FFP2	FFP3			
Part 7.17 Clogging	After clogging the inhalation resistances shall not exceed. (valved)	4 mba r	5 mba r	7 mbar	Not applicable		Not applicable
	The exhalation resist 3 mbar at 160 L/ (valved)				Not applicable		Not applicable
	After clogging the inhalation and exhalation resistances shall not exceed. (valveless)	3 mba r	4 mba r	5 mbar	Not applicable	-	Not applicable
Part 7.18 Demountable part	All demountable par readily connected possible by hand.				Not applicable	-	Not applicable
Part 9 Marking	and durably market commercially avail	ormation shall be clearly orked on the smallest vailable packaging or it if the packaging is			Appropriate		PASS

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9. DECISION PROPOSAL

Analysis and examinations LINDENPARTNER LP1-5model coded personal protective equipment; Respiratory Protective Devices EN 149:2001 +A1:2009- Filtered Half Masks for Protection Against Particles - Properties, Experiments and Marking standards are evaluated. It is recommended to be certified at the performance levels specified as a result of technical evaluations.

10. ATTACHMENTS

- Basic Health Safety Requirements
- Risk Assessment
- Test Report (M-2020-00624, m-2021-00274)
- User Instruction

Reason for revision: Manufacturer information has been revised.

CONTROLLER

: VOLKAN AKIN

SIGNATURE

DATE

: 16.11.2022



Report No: M-2021-00274 Date: 12.03.2021 Page 1 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST Brand : LINDENPARTNER

Sample Send Org. : LindenCare GmbH Sampler : CUSTOMER

Manufacturer Name : LindenCare GmbH

Analysis Date : 11.02.2021 Sample Quantity : 80 pieces

Other informations : MODULE C2 / Blue+Navy Blue+Green+Black+Pink

TESTS	LIMIT	RESULTS
EN ISO 14362-1 / EN ISO	< 30 mg/kg	< 5 mg/kg
17234-1		
Banned Azo Dyes		
EN 149+ A1 Part 7.9.1	At least 46 out of the 50 individual exercise result:	See below table
Total inward leakage	FFP1<25	
	FFP2<11	
	FFP3<5	
	At least 8 out of the 10 individual wearer arithmetic means:	
	FFP1<22	
	FFP2<8	
	FFP3<2	

	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average
Subject 1 (As received)	7.9	6.9	6.1	8.1	6.4	7.1
Subject 2 (As received)	7.6	5.2	5.7	6.4	6.3	6.2
Subject 3 (As received)	7.3	8.5	5.8	8.1	8.5	7.6
Subject 4 (As received)	7.2	7.9	7.7	8.2	8.5	7.9
Subject 5 (As received)	7.0	8.2	7.6	5.3	7.1	7.0
Subject 6 (After temperature conditioning)	7.3	7.6	5.8	6.4	8.6	7.1
Subject 7 (After temperature conditioning)	7.3	7.5	7.2	6.2	7.1	7.1
Subject 8 (After temperature conditioning)	7.4	8.5	7.0	7.1	7.3	7.5
Subject 9 (After temperature conditioning)	6.0	8.5	8.5	8.1	8.7	8.0
Subject 10 (After temperature conditioning)	7.9	7.7	7.9	7.2	6.2	7.4

Subject facial dimensions

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
1	133	132	132	65
2	125	144	116	67
3	126	135	124	75
4	123	133	134	74
5	117	135	122	73
6	122	142	133	66
7	113	132	114	75
8	135	123	123	65
9	122	135	133	74
10	135	142	125	83



Report No: M-2021-00274 Date: 12.03.2021 Page 2 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST Brand : LINDENPARTNER

Sample Send Org. : LindenCare GmbH Sampler : CUSTOMER

Manufacturer Name : LindenCare GmbH

Analysis Date : 11.02.2021

Sample Quantity : 80 pieces

Other informations : MODULE C2 / Blue+Navy Blue+Green+Black+Pink

TESTS	LIMIT	RESULTS
EN 149+ A1 Part 7.9.2	Sodium chloride, 95 L/min% FFP1≤20 FFP2≤6 FFP3≤1	See below table
Penetration of filter material	l Paraffin oil. 95 L/min% FFP1≤20 FFP2≤6 FFP3≤1	

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
EN 149+ A1 Part 7.9.2		7 7
As received	3.5	3.7
As received	3.6	3.7
As received	3.5	3.6
After the simulated wearing treatment	3.4	3.9
After the simulated wearing treatment	3.8	3.7
After the simulated wearing treatment	3.6	3.8
Mechanical strength and temperature conditioning (120 mg)	5.2	5.5
Mechanical strength and temperature conditioning (120 mg)	5.3	5.4
Mechanical strength and temperature conditioning (120 mg)	5.4	5.6

TESTS	LIMIT	RESULTS
EN 149+ A1 Part 7.11	Mask shall not burn or not to continue to burn for more than 5 s	Flame not seen
Flammibility		
EN 149+ A1 Part 7.12	Shall not exceed an average of % 1	0,71
Carbondioxide content of the inhalation air		0,73
		0,76
EN 149+ A1 Part 7.16	Inhalation 30L/min FFP1≤0,6mbar FFP2≤0,7mbar FFP3≤1,0mbar	See below table
Breathing Resistance	Inhalation 95L/min FFP1≤2,1mbar FFP2≤2,4mbar FFP3≤3,0mbar	
	Exhalation 160L/min FFP1≤3,0mbar FFP2≤3,0mbar FFP3≤3,0mbar	

EN 149+ A1 Part 7.16	Inhalation 30L/min (mbar)	Inhalation 95L/min (mbar)
Breathing Resistance (mbar)		
As received	0,5	1,9
As received	0.5	1,9
As received	0.6	1,9
After temperature conditioning	0.6	1,9
After temperature conditioning	0.5	1,8
After temperature conditioning	0.5	1,8
After the simulated wearing treatment	0.5	1,9
After the simulated wearing treatment	0.5	1,8
After the simulated wearing treatment	0.6	1,8
After the flow conditioning	-	-
After the flow conditioning	-	-
After the flow conditioning	-	-



Report No: M-2021-00274 Date: 12.03.2021 Page 3 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST Brand : LINDENPARTNER

Sample Type : PROTECTIVE MASK Model : LINDENPARTNER LP1-5

Sample Send Org. : LindenCare GmbH Sampler: CUSTOMER Manufacturer Name

Analysis Date : 11.02.2021 Sample Quantity : 80 pieces

Other informations : MODULE C2 / Blue+Navy Blue+Green+Black+Pink

: LindenCare GmbH

Breathing Resistance 160L/min (mbar) EN 149+ A1 Part 7.16	Facing directly ahead	Facing vertically upwards	Facing vertically downward s	Lying on the left side	Lying on the right side
As received	2,1	2,1	2,1	2,0	2,0
As received	2,1	2,1	2,1	2,1	2,1
As received	2,0	2,1	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,0	2,1	2,1	2,1
After temperature conditioning	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,0	2,0	2,1
After the flow conditioning	-	-	-	-	-
After the flow conditioning	-	-	-	-	-
After the flow conditioning	-	-	-	-	-



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Purpose of Analysis : SPECIAL REQUEST : LINDENPARTNER **Brand**

Sample Type : PROTECTIVE MASK Model : LINDENPARTNER LP1-5

Sample Send Org. : LindenCare GmbH Sampler: CUSTOMER

Manufacturer Name : LindenCare GmbH

Analysis Date : 11.02.2021 Sample Quantity : 80 pieces

Other informations : MODULE C2 / Blue+Navy Blue+Green+Black+Pink

Operating as an experimental laboratory, MNA Laboratories have been accredited by TURKAK with AB-1183-T and TS_EN_ISO / IEC_17025: 2017 standard. Turkish Accreditation Agency (TÜRKAK) signed a multilateral agreement with the European Accreditation Association (EA) on the recognition of test reports and a mutual recognition agreement with the International Laboratory Accreditation Association (ILAC). * Analysis is under accreditation.

Note :

- 1. No part of this analysis report can be used alone or separately, and may not be partially copied or reproduced, used to third parties and as a means of advertising without the written permission of the laboratory.
- 2. Analysis results are valid for the above mentioned sample sent by MNA Laboratory company / institution / person. It may not represent the whole.
- 3. Unsigned and unsealed reports are invalid.
- 4. This analysis report cannot be used in judicial-administrative procedures and for advertising purposes.
- 5. Results are valid for the sample as received.
- 6. The decision rule is the rule that determines how measurement uncertainty is taken into account when specifying the PASS density to a specified specification. According to the TLM-052 Decision Rule Implementation instruction, the Decision Rule Implementation Method selected in agreement with CUSTOMER is clearly stated in the report.
- 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 TS ISO 811 (Hydrostatic Pressure Tester E / N: 53) Analysis, Seam Strength EN ISO 13965-2 (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 ± 2 ° C temperature and 50 ± 4% relative humidity) are applied for ambient conditions.
- 11. List of phthalates analyzed is below.

Di-iso-nonyl phthalate (DINP), CAS number: 28553-12-0 or 68515-48-0

Di- (2-ethylhexyl) phthalate (DEHP), CAS number: 117-81-7

Di-n-octyl phthalate (DNOP), CAS number: 117-84-0 Di-iso-decyl phthalate (DIDP), CAS number: 26761-40-0 or 68515-49-1 Butyl benzyl phthalate (BBP), CAS number: 85-68-7

Di-butyl phthalate (DBP), CAS number: 84-74-2

Selin GERGIN Sampling and Reporting Officer

Erhan ÜSTÜNEL **PPE Laboratory Responsible**

Confirmed / 12.03.2021 Volkan AKIN **Laboratory Manager**



Report No: M-2020-00624 Date: 10.12.2020 Page 1 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST Brand

Sample Type: PROTECTIVE MASKModel: LP1-5 FFP2 NRSample Send Org.: LINDENCARE GMBHSampler: CUSTOMER

Manufacturer Name : LINDENCARE GMBH

Analysis Date : 07.12.2020 Sample Quantity : 100 pieces

Other informations :

TESTS	LIMIT	RESULTS
EN 149+ A1 Part 7.9.1 Total inward leakage	At least 46 out of the 50 individual exercise result: FFP1<25 FFP2<11 FFP3<5 At least 8 out of the 10 individual wearer arithmetic means: FFP1<22 FFP2<8 FFP3<2	See below table

Total Inward Leakage (%) EN 149+ A1 Part 7.9.1						
	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Average
Subject 1 (As received)	4.7	5.0	4.9	5.5	4.8	5.0
Subject 2 (As received)	5.5	5.4	4.8	4.9	5.6	5.2
Subject 3 (As received)	5.0	5.4	5.0	5.0	5.0	5.1
Subject 4 (As received)	4.9	5.0	4.9	5.5	5.6	5.2
Subject 5 (As received)	5.5	4.8	5.0	5.1	5.0	5.1
Subject 6 (After temperature conditioning)	5.0	5.0	4.9	5.5	4.9	5.1
Subject 7 (After temperature conditioning)	5.6	5.1	5.2	6.1	6.3	5.7
Subject 8 (After temperature conditioning)	5.6	5.3	5.6	4.8	4.8	5.2
Subject 9 (After temperature conditioning)	5.0	4.9	5.0	4.7	5.0	4.9
Subject 10 (After temperature conditioning)	5.1	5.0	4.8	4.9	4.9	4.9

Subject facial dimensions

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
1	133	132	132	65
2	125	144	116	67
3	126	135	124	75
4	123	133	134	74
5	117	135	122	73
6	122	142	133	66
7	113	132	114	75
8	135	123	123	65
9	122	135	133	74
10	135	142	125	83



Report No: M-2020-00624 Date: 10.12.2020 Page 2 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST Brand :

Sample Type: PROTECTIVE MASKModel: LP1-5 FFP2 NRSample Send Org.: LINDENCARE GMBHSampler: CUSTOMER

Manufacturer Name : LINDENCARE GMBH

Analysis Date : 07.12.2020 Sample Quantity : 100 pieces

Other informations :

TESTS	LIMIT	RESULTS
EN 149+ A1 Part 7.9.2	Sodium chloride, 95 L/min% FFP1≤20 FFP2≤6 FFP3≤1	See below table
Penetration of filter material	Paraffin oil. 95 L/min% FFP1≤20 FFP2≤6 FFP3≤1	

Penetration of filter material	Sodium Chloride (%)	Paraffin Oil (%)
EN 149+ A1 Part 7.9.2		
As received	3.0	3.0
As received	3.7	3.5
As received	3.9	3.4
After the simulated wearing treatment	3.7	3.3
After the simulated wearing treatment	3.4	3.4
After the simulated wearing treatment	3.9	3.3
Mechanical strength and temperature conditioning (120 mg)	3.1	3.5
Mechanical strength and temperature conditioning (120 mg)	3.6	3.3
Mechanical strength and temperature conditioning (120 mg)	3.7	3.5

TESTS	LIMIT	RESULTS
EN 149+ A1 Part 7.11	Mask shall not burn or not to continue to burn for more than 5 s	Flame not seen
Flammibility		
EN 149+ A1 Part 7.12	Shall not exceed an average of % 1	0,60
Carbondioxide content of the inhalation air		0,67
		0,63
EN 149+ A1 Part 7.16	Inhalation 30L/min FFP1≤0,6mbar FFP2≤0,7mbar FFP3≤1,0mbar	See below table
Breathing Resistance	Inhalation 95L/min FFP1≤2,1mbar FFP2≤2,4mbar FFP3≤3,0mbar	
	Exhalation 160L/min FFP1≤3,0mbar FFP2≤3,0mbar FFP3≤3,0mbar	

EN 149+ A1 Part 7.16	Inhalation 30L/min (mbar)	Inhalation 95L/min (mbar)
Breathing Resistance (mbar)		
As received	0.4	0.9
As received	0.4	0.8
As received	0.3	0.8
After temperature conditioning	0.3	0.8
After temperature conditioning	0.4	0.9
After temperature conditioning	0.3	0.8
After the simulated wearing treatment	0.3	0.9
After the simulated wearing treatment	0.3	0.8
After the simulated wearing treatment	0.4	0.9
After the flow conditioning	-	-
After the flow conditioning	-	-



Brand

Report No: M-2020-00624 Date: 10.12.2020 Page 3 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST

: LINDENCARE GMBH

Sample Type : PROTECTIVE MASK Model : LP1-5 FFP2 NR Sample Send Org. Sampler: CUSTOMER

Manufacturer Name : LINDENCARE GMBH

Analysis Date : 07.12.2020 Sample Quantity : 100 pieces

Other informations :

After the flow conditioning	-	-

Breathing Resistance 160L/min (mbar) EN 149+ A1 Part 7.16	Facing directly ahead	Facing vertically upwards	Facing vertically downward s	Lying on the left side	Lying on the right side
As received	2,1	2,1	2,1	2,1	2,1
As received	2,2	2,1	2,1	2,1	2,1
As received	2,1	2,1	2,1	2,1	2,1
After temperature conditioning	2,2	2,1	2,2	2,1	2,1
After temperature conditioning	2,2	2,1	2,1	2,2	2,1
After temperature conditioning	2,2	2,1	2,1	2,1	2,1
After the simulated wearing treatment	2,2	2,2	2,2	2,1	2,1
After the simulated wearing treatment	2,1	2,1	2,2	2,2	2,2
After the simulated wearing treatment	2,1	2,1	2,1	2,1	2,1
After the flow conditioning	-	-	-	-	-
After the flow conditioning	-	-	-	-	-
After the flow conditioning	-	-	-	-	-



Report No: M-2020-00624 Date: 10.12.2020 Page 4 of 4 Rev:

Purpose of Analysis : SPECIAL REQUEST **Brand**

Sample Type : PROTECTIVE MASK Model : LP1-5 FFP2 NR Sample Send Org. : LINDENCARE GMBH Sampler: CUSTOMER

Manufacturer Name : LINDENCARE GMBH

Analysis Date : 07.12.2020 Sample Quantity : 100 pieces

Other informations

Operating as an experimental laboratory, MNA Laboratories have been accredited by TURKAK with AB-1183-T and TS_EN_ISO / IEC_17025: 2017 standard. Turkish Accreditation Agency (TÜRKAK) signed a multilateral agreement with the European Accreditation Association (EA) on the recognition of test reports and a mutual recognition agreement with the International Laboratory Accreditation Association (ILAC). * Analysis is under accreditation.

Note:

- 1. No part of this analysis report can be used alone or separately, and may not be partially copied or reproduced, used to third parties and as a means of advertising without the written permission of the laboratory.
- 2. Analysis results are valid for the above mentioned sample sent by MNA Laboratory company / institution / person. It may not represent the whole.
- 3. Unsigned and unsealed reports are invalid.
- 4. This analysis report cannot be used in judicial-administrative procedures and for advertising purposes.
- 5. Results are valid for the sample as received.
- 6. The decision rule is the rule that determines how measurement uncertainty is taken into account when specifying the PASS density to a specified specification. According to the TLM-052 Decision Rule Implementation instruction, the Decision Rule Implementation Method selected in agreement with CUSTOMER is clearly stated in the report.
- 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 TS ISO 811 (Hydrostatic Pressure Tester E / N: 53) Analysis, Seam Strength EN ISO 13965-2 (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.

11. List of phthalates analyzed is below.

Di-iso-nonyl phthalate (DINP), CAS number: 28553-12-0 or 68515-48-0

Di- (2-ethylhexyl) phthalate (DEHP), CAS number: 117-81-7

Di-n-octyl phthalate (DNOP), CAS number: 117-84-0 Di-iso-decyl phthalate (DIDP), CAS number: 26761-40-0 or 68515-49-1

Butyl benzyl phthalate (BBP), CAS number: 85-68-7 Di-butyl phthalate (DBP), CAS number: 84-74-2

Selin GERGIN Sampling and Reporting

Erhan ÜŞTÜNEL PPE Laboratory Responsible

Confirmed 10.12,2020 Volkan AKIN Laboratory Manager