

**IFA**

Institut für Arbeitsschutz der
 Deutschen Gesetzlichen Unfallversicherung
 Prüf- und Zertifizierungsstelle im DGUV Test

Prüf- und Zertifizierungsstelle
 im DGUV Test

Datum/Date: 2019-04-23 Krs/Sik

Translation

In any case, the German original shall prevail.

PRÜFBERICHT TEST REPORT

Nr./No.: 201920583/2120

- | | | |
|----------|---|--|
| 1 | Auftraggeber/
Customer | Venus Safety & Health Pvt. Ltd.
L-17, M.I.D.C. - Taloja, Dist: Raigad
410 208 Maharashtra
India |
| 2 | Prüfmuster/
Test specimen | Facepiece |
| 2.1 | Hersteller/
Manufacturer | Venus Safety & Health Europe BV
Veldm. Montgomerylaan 203
5612 BD Eindhoven
The Netherlands |
| 2.2 | Bauart, Bezeichnung/
Type, designation | Half mask with two special thread connectors
VENUS V-800 Small
VENUS V-800 Medium
VENUS V-800 Large |
| | Kennzeichnung /
Marking | Faceblank size Small: S, colour blue
Faceblank size Medium: (M) RPL-200-1, colour grey
Faceblank size Large: (L) RPL-219-1, colour grey
Inner connector yonke: RPL 203-1
Outer suspension yonke: (S) RPL 204-2; (M) RPL 204-1; (L) RPL 204-2
Exhalation valve cover: RPL 201-2 Venus V-800 EN140:1998 (S)
RPL 201-3 Venus V-800 EN140:1998 (M)
RPL 201-4 Venus V-800 EN140:1998 (L)
Textile harness: VENUS
Head harness: RPL 630
Banding closure: RPL 212 A; RPL 212 B |
| 2.3 | Bestimmungsgemäße
Verwendung/
Intended use | Intended for non power assisted use in connection with pairwise used positiv tested gas, particle or combined filters of series VENUS V-7800. |
| 2.4 | Datum der Herstellung/
Date of fabrication | 2019 |



2.5 Weitere Angaben/
Further details -.-

3 Prüfung/ Testing

3.1 Art der Prüfung/
Type of test EU-type test

3.2 Datum der Prüfung/
Date of testing February-April 2019

3.3 Prüfverfahren, -grundlagen/
Test method, requirements DIN EN 140:1998

4 **Beurteilung, Eignung/
Assessment, suitability**
(Besondere Hinweise/
Special remarks) The half mask VENUS V-800 Small fulfils the requirements of DIN EN 140:1998 for half masks.

Special Remarks:

According to a manufacturer's statement the half mask VENUS V-800 S / M / L is identical in design and material, except of the colour of the textile harness and the colour of the faceblanks with the half mask VENUS V-800 S / M / L (Test report 200923331 of 2010-05-04). The colour of the textile harness is grey instead of blue. The colour of the faceblank of the half mask VENUS V-800 Small is blue instead of yellow and the colour of the faceblank of the half mask VENUS V-800 Large is grey instead of blue.

In the test-protocol are listed test-results from the test report VENUS V-800 S / M / L under the items 6-21

Item 23 of the enclosed test protocol has to be regarded.

5 Gültigkeit des Prüfberichtes/ Validity of Test Report

Die ermittelten Ergebnisse gelten nur für die geprüften Objekte.
The test results apply to the tested objects only.

Einschränkungen der Gültigkeit oder Verwendung dieses Prüfberichtes:
Limitation of validity or use of this Test Report:

-.-

6 Allgemeine Hinweise/ General remarks

Dieser Prüfbericht besteht aus
The present Test Report consists of

10

Seiten.
Pages.

Die Seiten 1 bis 3 enthalten das Gesamtergebnis der Prüfung. Zum vollständigen Prüfbericht gehört das Prüfprotokoll, aus dem die Einzelangaben ersichtlich sind.
Pages 1 to 3 indicate the overall test result. The complete Test Report also includes the test protocol containing all pertinent details.



**Dieser Prüfbericht berechtigt n i c h t zur Verwendung des GS-Zeichens,
BG-Zeichens oder CE-Zeichens.**

The present Test Report does n o t warrant the use of the GS-label, BG-label or CE-mark.

Im Übrigen gilt die Prüf- und Zertifizierungsordnung der Prüf- und Zertifizierungsstellen im DGUV Test in Verbindung mit den Allgemeinen Geschäftsbedingungen der Deutschen Gesetzlichen Unfallversicherung e.V.

In all other respects the Rules of Procedure for Testing and Certification carried out by the Test and Certification Bodies in DGUV Test shall apply in conjunction with the General Business Conditions of the Deutsche Gesetzliche Unfallversicherung e.V.

Für die Prüfung:

For the testing:

Dipl.-Ing. Judith Krisinger

Leiterin des Prüflabors

Head of Testlaboratory



Prüfprotokoll

Test protocol

1. **Test Method:** DIN EN 140:1998
2. **Type of test:** EU-type test
3. **Customer:** Venus Safety & Health Pvt. Ltd.
4. **Test specimen**
 - 4.1 **Type:** Half mask with two special thread connectors
 - 4.2 **Designation:** VENUS V-800 Small
VENUS V-800 Medium
VENUS V-800 Large
 - 4.3 **Marking:**

Faceblank size Small:	S, colour blue
Faceblank size Medium:	(M) RPL-200-1, colour grey
Faceblank size Large:	(L) RPL-219-1, colour grey
Inner connector yonke:	RPL 203-1
Outer suspension yonke:	(S) RPL 204-2; (M) RPL 204-1; (L) RPL 204-2
Exhalation valve cover:	RPL 201-2 Venus V-800 EN140:1998 (S) RPL 201-3 Venus V-800 EN140:1998 (M) RPL 201-4 Venus V-800 EN140:1998 (L)
Textile harness:	VENUS
Head harness:	RPL 630
Banding closure:	RPL 212 A; RPL 212 B

5. Visual inspection

The half masks VENUS V-800 S / M / L, which are submitted for EU-type test, are optical identical, except of the colour of the faceblank sizes Small and Large and the colour of the textile harness with the half mask VENUS V-800 S / M / L (EC-type test certificate No. IFA 1001124 of 2010-05-10). The colour of the textile harness is grey instead of blue. The colour of the faceblank of the half mask VENUS V-800 Small is blue instead of yellow and the colour of the faceblank of the half mask VENUS V-800 Large is grey instead of blue.

6. Materials

The requirements are fulfilled.

7. Demountable parts

All demountable connections shall be readily connected and secured.

Any means of sealing used shall be retained in position when the connection is disconnected.

The requirements are fulfilled.

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8. Resistance to temperature

Following the conditioning in accordance with DIN EN 140:1998 clause 7.2 and after being allowed to return to ambient temperature the facepiece shall show no appreciable deformation.

The requirements are fulfilled.

9. Inhalation valve

The half mask VENUS V-800 S / M / L is designed with to connectors with integrated inhalation valves.

The function of inhalation valves is correctly in all orientations.

The requirements are fulfilled.

10. Exhalation valve

The exhalation valve is protected against dirt and mechanical damage and function correctly in all orientations.

Further on two half masks were tested, one after temperature conditioning (DIN EN 140:1998 clause 7.2) and one half mask was tested as received.

10.1 Test at exhalation flow rate of 300 l/min

Exhalation valves shall continue to operate correctly after a continuous exhalation flow of 300 l/min over a period of 30 s

The requirement is fulfilled.

10.2 Test of the fitting of the exhalation valve housing

When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 50 N applied for 10 s.

The requirement is fulfilled.

11. Flammability

Parts of the facepiece that might be exposed to a flame during use shall either not burn or not continue to burn for more than 5 s after removal from the flame.

Two samples were tested: both in the state as received.

The requirements are fulfilled.

12. Head harness

Each strap of the head harness shall withstand a pull of 5 N applied for 10 s in the direction of pulling when the facepiece is donned.

The requirement is fulfilled.

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13. Connector

13.1 Type of connection

The half mask VENUS V-800 S / M / L designed with two special thread connectors.

The requirement to the connection is fulfilled.

13.2 Steadiness of the connection

The connection between the faceblank and the connector shall be sufficiently robust to withstand axially a tensile force of 50 N.

Two half masks were tested, one after temperature conditioning (DIN EN 140:1998 clause 7.2) and one half mask was tested as received.

The requirement to the steadiness of the connection is fulfilled.

14. Breathing resistance

14.1 Requirements

Max. breathing resistance for inhalation at a flow rate of 30 l/min: 50 Pa

Max. breathing resistance for inhalation at a flow rate of 95 l/min: 130 Pa

Max. breathing resistance for inhalation at a flow rate of 160 l/min: 200 Pa

Max. breathing resistance for exhalation at a flow rate of 160 l/min: 300 Pa

14.2 Test results

Test	Conditioning	Breathing resistance [Pa]			
		Inhalation at 30 l/min	Inhalation at 95 l/min	Inhalation at 160 l/min	Exhalation at 160 l/min
1	as received	12	59	103	180
2	EN140:1998 cl.7.2	15	61	114	168

The requirements are fulfilled.

15. Inward leakage (mask leakage)

15.1 Test method: NaCl-method; SF₆-method

15.2 Test conditions

Treadmill speed: 6 km/h

Duration of exercise: 2 min per exercise

Type of exercises: Ex. No. 1 and 5 = Walking
Ex. No. 2 = Walking and turning the head
Ex. No. 3 = Walking and nodding of the head
Ex. No. 4 = Walking and speaking

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15.3 Requirements

The leakage shall not exceed 5% in 46 of the 50 individual results (10 persons x 5 exercises).

The leakage shall not exceed 2% in 8 of the 10 arithmetic means (10 persons).

15.4 Preparation of the test specimens

The tests were carried out by pairwise using of the gas filter VENUS V-7800 ABEK1 and of the particle filter VENUS V-7800 P3.

At a flow rate of 47,5 l/min the mean inhalation breathing resistance of the filters is 250 Pa and the sodium chloride penetration is 0,002 %.

The tests 1-2 & 5-8 were performed by means of the NaCl-method and the tests 3-4 & 9-10 were performed by means of the SF₆-method.

The total mass of the filter used in connection with the half mask is 280 g.

15.5 Test specimen

T.-No. 1, 7: VENUS V-800 Small

T.-No. 2-5, 8-10: VENUS V-800 Medium

T.-No. 6: VENUS V-800 Large

15.6 Test results (inward leakage in %)

Person	Conditioning	Exercises					mean
		1	2	3	4	5	
1	as received	0,1	0,1	0,1	0,1	0,1	0,1
2	as received	0,5	1,8	1,1	0,8	0,7	0,9
3	as received	1,1	1,3	1,4	1,3	1,2	1,2
4	as received	0,8	1,3	1,4	1,1	0,8	1,0
5	as received	0,2	0,3	0,4	0,2	0,2	0,2
6	EN 140:1998, 7.2	0,1	0,1	0,2	0,2	0,1	0,1
7	EN 140:1998, 7.2	0,1	0,1	0,1	0,8	0,6	0,3
8	EN 140:1998, 7.2	0,6	0,8	0,2	0,3	0,1	0,4
9	EN 140:1998, 7.2	1,1	1,3	1,5	1,4	1,1	1,2
10	EN 140:1998, 7.2	3,8	3,4	4,2	5,6	4,4	4,2

The requirements are fulfilled.

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16. Practical performance

After practical performance test the device was assessed by two test subjects.

16.1 Test specimen:

T.-No. 1:	VENUS V-800 Small
T.-No. 2:	VENUS V-800 Medium
T.-No. 3:	VENUS V-800 Large

16.2 Assessment wearer 1

Head harness comfort:	no complaint
Security of fastenings:	no complaint
Field of vision:	no complaint
Additional remarks:	none

16.3 Assessment wearer 2

Head harness comfort:	no complaint
Security of fastenings:	no complaint
Field of vision:	no complaint
Additional remarks:	none

16.4 Assessment wearer 3

Head harness comfort:	no complaint
Security of fastenings:	no complaint
Field of vision:	no complaint
Additional remarks:	none

17. Cleaning and disinfecting

The materials used shall withstand the cleaning and disinfecting agents and procedures as recommended by the manufacturer.

The requirement is fulfilled.

18. Carbon dioxide content of the inhalation air

18.1 Requirement

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0 % (by volume).

18.2 Test specimen

T.-No. 1:	VENUS V-800 Small
T.-No. 2:	VENUS V-800 Medium
T.-No. 3:	VENUS V-800 Large

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18.3 Test results

Test	Conditioning	CO ₂ -Concentration [Vol.-%]
1	EN 140:1998 Absch. 7.2	0,44
2	EN 140:1998 Absch. 7.2	0,59
3	EN 140:1998 Absch. 7.2	0,36

The requirements are fulfilled.

19. Compatibility with skin

Materials that can come into contact with the wearer's skin shall not be known to be likely to cause irritation or any other adverse effect to health.

The requirements are fulfilled.

20. Field of vision

The field of vision is acceptable if determined so in practical performance tests.

The requirement is fulfilled.

21. Mass of the half mask:

VENUS V-800 Small	80 g
VENUS V-800 Medium	82 g
VENUS V-800 Large	82 g

22. Marking

22.1 Marking of mask

The requirements are fulfilled.

22.2 Marking of packaging

The requirements are fulfilled.

23. Information supplied by the manufacturer

Only the instructions for use in English language were revised.

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The performed test results apply to the tested objects only.
A statement about the uniformity of production cannot be derived.

Institute for Occupational Safety and Health – IFA –
In charge

Dipl.-Ing. Judith Krisinger

Person responsible

Benedikt Brenner

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