

Testing site: via Braide Matte, 4 33048 San Giovanni al Natisone (UD) tel. +39 0432 747211 lab@catas.com

Date received: 22/01/18

Date of issue: 26/02/18

Report consists of 14 test reports.

Defects before testing: None

Sample name: CARISTO low back

SAMPLE N° 245027

Overall dimensions: 820 x 700 x 880 (h) mm

List performed tests:

- 1. Safety requirements EN 16139:2013+AC:2013
- 2. Seat and back static load test EN 1728:2012+AC:2013
- 3. Vertical load on back rest EN 1728:2012+AC:2013
- 4. Arm sideways static load test EN 1728:2012+AC:2013
- 5. Arm downwards static load test EN1728:2012+AC:2013
- 6. Seat and back fatigue test EN 1728:2012+AC:2013
- 7. Seat front edge durability test EN 1728:2012+AC:2013
- 8. Arm fatigue test EN 1728:2012+AC:2013
- 9. Leg forward static load test EN 1728:2012+AC:2013
- 10. Leg sideways static load test EN 1728:2012+AC:2013
- 11. Seat impact test EN 1728:2012+AC:2013
- 12. Back impact test EN 1728:2012+AC:2013
- 13. Arm rest impact test EN 1728:2012+AC:2013
- 14. Stability EN 1022:2005



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Managing Director Dr. Andrea Giavon



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SAMPLE N° 245027

Date of issue: 26/02/18

Sample weight: Not determined
Sample name: CARISTO low back



Side view



Bottom view



Rear view



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LAB N° 0027 Membro degli MRA EA, IAF e ILAC

TEST REPORT

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Date received: 22/01/18 Date of test: 23/01/18 Date of issue: 26/02/18

CARISTO low back Sample name:



Safety requirements EN 16139:2013+AC:2013

Safety requirements clause 4

| Statement checked | Remarks |
|---|--|
| Corner and edges in contact with the users: | Tiomane . |
| Absence of sharp edges and corners | Yes |
| Edges on the handles: | |
| Absence of sharp edges and corners in the direction of the force | Handles not present |
| Other edges: | |
| Absence of sharp edges and corners | Yes |
| Accessible hollow components: | |
| The ends of hollow components are closed or capped | Yes |
| Movable and adjustable parts: | |
| • It shall not be possible for any movable and adjustable part of the chair to come operate unintentionally. | Movable and adjustable parts not present |
| Connections between parts of the structure: | |
| It shall not be possible for any load bearing part of the seating to come loose unintentionally | No |
| Parts which are lubricated: | |
| • All the parts which are lubricated shall be designed to protect users | Lubricated parts not present |
| Shear and squeeze points between movable parts ≥ 8 mm ≤ 25 mm: | |
| Shear and squeeze points under influence of powered mechanism | Mechanism not present |
| Shear and squeeze points during normal use and during normal movements and actions | No |
| Conformity to clauses 4.1 and 4.2 of standard EN 16139:2013: | YES |

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TEST REPORT

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Date received: 22/01/18 Date of test: 23/01/18 Date of issue: 26/02/18

CARISTO low back Sample name:



Seat and back static load test EN 1728:2012+AC:2013

Seat and back static load test, clause 6.4

Test results:

| Seat load N | Back force N | Number of cycles | Remarks |
|----------------|-----------------|------------------|------------|
| 1.600 | 560 | 10 | No defects |

Seat front edge static load, clause 6.5

| Seat load N | Number of cycles | Remarks |
|----------------|------------------|------------|
| 1.300 | 10 | No defects |

Note:

The test has been carried out according to table 1 of EN 16139:2013, level L1 - general.

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TEST REPORT

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 Date received:
 22/01/18

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 23/01/18

 Date of issue:
 26/02/18

Sample name: CARISTO low back



Vertical load on back rest EN 1728:2012+AC:2013

Vertical static load on back rest clause 6.6

Test results:

| Seat load N | Downwards force N | Number of applications | Remarks |
|-------------------|-------------------------|------------------------|------------|
| 1.300 | 600 | 10 | No defects |

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TEST REPORT

Date of test: Date of issue:

245027 / 4 Date received: 22/01/18 23/01/18 26/02/18 CARISTO low back Sample name:

Arm sideways static load test EN 1728:2012+AC:2013

Arm sideways static load test clause 6.10

Test results:

| Horizontal force N | Number of applications | Remarks |
|--------------------------|------------------------|------------|
| 400 | 10 | No defects |

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TEST REPORT

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 Date received:
 22/01/18

 Date of test:
 23/01/18

 Date of issue:
 26/02/18

Sample name: CARISTO low back



Arm downwards static load test EN1728:2012+AC:2013

Arm downwards static load test clause 6.11

Test results:

| Vertical force N | Number of applications | Remarks |
|------------------------|------------------------|------------|
| 750 | 5 | No defects |

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TEST REPORT

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Date received: 22/01/18 Date of test: 23/01/18 Date of issue: 26/02/18

CARISTO low back Sample name:



Seat and back fatigue test EN 1728:2012+AC:2013

Seat and back fatigue test, clause 6.17

Test results:

| Seat force N | Back force N | Number of cycles | Remarks |
|-----------------|-----------------|------------------|------------|
| 1.000 | 300 | 100.000 | No defects |

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TEST REPORT

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Date received: 22/01/18 Date of test: 02/02/18 Date of issue: 26/02/18

Sample name: CARISTO low back



Seat front edge durability test EN 1728:2012+AC:2013

Seat front edge durability test clause 6.18

Test results:

| Points of application | Seat force N | Number of cycles | Remarks |
|---------------------------------|-----------------|------------------|------------|
| 100 mm back from the front edge | 800 | 50.000 | No defects |

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TEST REPORT

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 Date received:
 22/01/18

 Date of test:
 05/02/18

 Date of issue:
 26/02/18

ate of issue: 26/02/18



Sample name: CARISTO low back

Arm fatigue test EN 1728:2012+AC:2013

Arm fatigue test clause 6.20

Test results:

| Force on arm rest N | Number of cycles | Remarks |
|---------------------------|---------------------|------------|
| 400 | 30.000 | No defects |

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Date received: 22/01/18 Date of test: 08/02/18 Date of issue: 26/02/18

Sample name: CARISTO low back



Leg forward static load test EN 1728:2012+AC:2013

Leg forward static load test clause 6.15

Test results:

| Forward horizontal force N | Balancing seat force N | Number of cycles | Remarks |
|----------------------------------|------------------------------|------------------|------------|
| 500 | 1.000 | 10 | No defects |

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TEST REPORT

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Date received: 22/01/18 Date of test: 08/02/18 Date of issue: 26/02/18

CARISTO low back Sample name:



Leg sideways static load test EN 1728:2012+AC:2013

Leg sideways static load test clause 6.16

Test results:

| Sideways horizontal force N | Balancing seat force N | Number of cycles | Remarks |
|-----------------------------------|------------------------------|------------------|------------|
| 400 | 1.000 | 10 | No defects |

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 Date received:
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 Date of test:
 09/02/18

 Date of issue:
 26/02/18





Seat impact test EN 1728:2012+AC:2013

Seat impact test clause 6.24

Test results:

| Mass of impactor kg | Height of drop mm | Number of drops | Remarks |
|---------------------|-------------------------|--------------------|------------|
| 25 | 240 | 10 | No defects |

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TEST REPORT

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Date received: 22/01/18 Date of test: 09/02/18 Date of issue: 26/02/18





Back impact test EN 1728:2012+AC:2013

Back impact test clause 6.25

Test results:

| Angle | Mass of impactor kg | Number of cycles | Remarks |
|-------|---------------------|---------------------|------------|
| 38 | 6,5 | 10 | No defects |

Note:

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TEST REPORT

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Date received: 22/01/18 Date of test: 09/02/18 Date of issue:

26/02/18



CARISTO low back Sample name:

Arm rest impact test EN 1728:2012+AC:2013

Arm rest impact test clause 6.26

Test results:

| Angle | Mass of impactor kg | Number of cycles | Remarks |
|-------|---------------------|---------------------|------------|
| 38 | 6,5 | 10 | No defects |

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TEST REPORT

245027 / 14

 Date received:
 22/01/18

 Date of test:
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 Date of issue:
 26/02/18



Date of issue: 26/02/18

Sample name: CARISTO low back

Stability - EN 1022:2005

Type of chair: fixed geometry

Minimum horizontal force for rearwards overturning of fixed back chair: 196 N

Forwards overturning

Horizontal force : 20 N does not overturn

Rearwards overturning

Fixed back chair

Horizontal force : 196 N does not overturn

Tilting chair in the rearmost position

Loading discs on the seat : /

Sideways overturning for chairs with arms

Horizontal force : 20 N does not overturn

Sideways overturning for chairs without arms

Horizontal force : /

Forwards overturning for chairs with footrest

Horizontal force : /

Test passed

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