

TEST REPORT

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Applicant :

Address :

Below information submitted by the applicant:

Product Name : GARDEN SWING CHAIR

Model : SP-176

Model may cover : /

Reference info. : /

Manufacturer info. : /

Supplier info. : /

Buyer info. : /

Country of Destination : /

Country of Origin : China

Sample Received : 12.11, 2023

Test Period : 12.11, 2023 - 12.18, 2023

Test Requirement : Refer to next pages

Test Method : Refer to next pages

Test Result : Refer to next pages

Test Conclusion : Refer to next pages



Signed for and on behalf of
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BU Chemical Compliance
TUV THÜRINGEN (SHANGHAI) CO., LTD.
Location: Shanghai

TÜV THÜRINGEN CHINA

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RESULT SUMMARY

As the applicant required, to carry the test items as below:

| Test items | Verdict |
|--|---------|
| 1. EN 581-1:2017, outdoor furniture – seating and table for camping, domestic and contract use – part 1, general safety requirement | PASS |
| 2. EN 581-2:2015+AC:2016, outdoor furniture – seating and table for camping, domestic and contract use – part 2, mechanical safety requirements and test method for seating, except clause 8 | PASS |

SAMPLE DESCRIPTION

Sample Description : 1# GARDEN SWING CHAIR

TEST RESULT(S)

1. General safety requirements for seatings

Test Method: Outdoor furniture — Seating and tables for camping, domestic and contract use Part 1: General safety requirements (EN 581-1:2017)

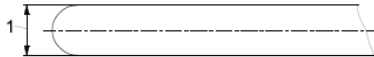


Number of tested specimen: 1pcs

Test Results: details, as below

| Clause | Test Items/ requirements | Results | Rating |
|--------|--------------------------|--|--------|
| 5 | Safety requirements | | |
| 5.1 | General | <p>Specimen type: other seating</p> <p>Results:</p> <p>Edges of the seat, back rest and arm rests and any part of the bottom surface of the seat at a distance less than 120 mm from any edge, where a finger can commonly access were found: all edges and corners were round, chamfered or otherwise protected, refer to images.</p> <p>All other parts: all parts were free from burrs, sharp edges and sharp points.</p> <p>All parts which are lubricated to assist sliding: not found.</p> | PASS |
| 5.2 | Tubular components | Meet with the requirements. | PASS |

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| Clause | Test Items/ requirements | Results | Rating |
|--------|--|--|--------|
| |  <p>Key</p> <p>1 $\emptyset 7^{+0}_{-0.1}$ mm, $\emptyset 12^{+0.1}_{-0}$ mm and $\emptyset 18^{+0.1}_{-0}$ mm</p> | | |
| 5.3 | Shear and squeeze points | | |
| 5.3.1 | <p>Shear and squeeze points when erecting, adjusting and folding away</p> <p>Unless 5.3.2 or 5.3.3 are applicable, shear and squeeze points that are created only during erecting, adjusting or folding away are acceptable providing the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately on experiencing pain.</p> | Meet with the requirements. | PASS |
| 5.3.2 | <p>Shear and squeeze points under the influence of powered mechanisms</p> <p>There shall be no accessible shear and squeeze points created by parts of the furniture operated by powered mechanisms, e.g. mechanical springs and gas lifts.</p> <p>This requirement shall be assessed using the test probes (Clause 4).</p>  <p>Key</p> <p>1 $\emptyset 7^{+0}_{-0.1}$ mm, $\emptyset 12^{+0.1}_{-0}$ mm and $\emptyset 18^{+0.1}_{-0}$ mm</p> | <p>No powered mechanisms with shear and squeeze points applied.</p> <p>N/A</p> | |
| 5.3.3 | <p>Shear and squeeze points during use</p> <p>There shall be no accessible shear and squeeze points created by loads applied during normal use. Shear and squeeze points are not acceptable if there is a risk of injury created by the weight of the user during normal movements and actions, e.g. attempting to move the seating by lifting the seat or by adjusting the backrest.</p> <p>This requirement shall be assessed using the test probes (Clause 4).</p>  <p>Key</p> <p>1 $\emptyset 7^{+0}_{-0.1}$ mm, $\emptyset 12^{+0.1}_{-0}$ mm and $\emptyset 18^{+0.1}_{-0}$ mm</p> | <p>Other chairs.</p> <p>Meet with the requirements.</p> | PASS |
| | <p>For loungers, the loads applied during normal use are the loads used for the following mechanical tests in Table 1 of EN 581-2:2015+AC:2016:</p> <ul style="list-style-type: none"> — Test 2: Additional seat and leg rest static load; — Test 3: Seat and back durability; — Test 4: Additional seat durability; — Test 5: Durability on back rest mechanism. <p>For other seating, the loads applied during normal use are the loads used for the following mechanical tests in Table 2 of EN 581-2:2015+AC:2016:</p> <ul style="list-style-type: none"> — Test 2: Seat front edge static; — Test 3: Combined seat and back durability; — Test 4: Durability test on seating with a multi- | | |

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| Clause | Test Items/ requirements | Results | Rating |
|--------|--|---------|--------|
| | position back. For tables, the loads applied during normal use are the loads used for the following mechanical tests in Table 1 of EN 581-3:2007: — Test 1: Vertical static load on main surface; — Test 4: Vertical static load on ancillary surface; — Test 5: Horizontal durability test. | | |

2. Outdoor furniture — Seating and tables for camping, domestic and contract use Part 2: Mechanical safety requirements and test methods for seating (EN 581-2:2015+AC:2016)

Number of tested specimen: 1pcs

Test Results: details, as below

| Clause | Test Items/ requirements | Results | Rating |
|--------|--|-----------------------------|--------|
| 6 | Safety, strength and durability requirements for loungers | | |
| 6.1 | General | | |
| | Before and after the strength, durability and stability tests are carried out, the EN 581-1 requirements shall be fulfilled. | Other chairs | N/A |
| 6.2 | Stability, strength and durability | | |
| 6.2.1 | Test sequence and parameters | | |
| | The lounge shall be tested following the order listed in Table 1. | Other chairs | N/A |
| 6.2.2 | Requirements | | |
| | The safety, strength and durability requirements are fulfilled after testing in accordance with Table 1 when: a) there are no fractures of any joint, member or component, b) there is no loosening of joints intended to be rigid, c) the lounge fulfils its function after removal of the test loads, d) the product shall not overturn when subjected to the stability tests. | Other chairs | N/A |
| 7 | Safety, strength and durability requirements for other seating | | |
| 7.1 | General | | |
| | Before and after the strength, durability and stability tests are carried out, the requirements of EN 581-1 shall be fulfilled. | Meet with the requirements. | PASS |
| 7.2 | Stability, strength and durability | | |
| 7.2.1 | Test sequence and parameters | | |
| | The seating shall be tested for strength, durability and stability following the order listed in Table 2. | Meet with the requirements. | PASS |
| 7.2.2 | Requirements | | |
| | The safety, strength and durability requirements are fulfilled after testing in accordance with Table 2 when: a) there are no fractures of any joint, member or component, b) there is no loosening of joints intended to be rigid, c) the seating fulfils its function after removal of the test loads, | Meet with the requirements. | PASS |

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| Clause | Test Items/ requirements | Results | Rating |
|--------|--|---------|--------|
| | d) the seating fulfils the safety requirements, e) the product shall not overturn when subjected to the stability tests. | | |
| 8 | Information for use | | |
| 8.1 | General | | |
| | Instruction for use shall be provided in the language(s) of the country where the seating are sold. These instructions shall be headed "IMPORTANT, RETAIN FOR FUTURE REFERENCE: READ CAREFULLY" in letters no less than 5 mm high, unless if the following information are permanently marked on the product. | | N/R |
| | It shall contain at least the following details: a) name and address of the manufacturer/supplier/retailer; b) conditions for use of the product (domestic, camping or contract). If applicable: c) assembly instructions; d) instructions for the care and maintenance of the seating; e) if the seating is fitted with seat height adjustments with energy accumulators, an additional note is required pointing out that only trained personnel may replace or repair seat height adjustment components with energy accumulators. | | N/R |

Table 1 — Test sequence and test parameters for loungers

| Test | References | Test Parameters | | | | Results |
|--|---------------------|--------------------------------------|---------|----------|----------|---------|
| | | Items | Camping | Domestic | Contract | |
| 1. Seat and back static load test | EN 1728:2013, 8.2 | Specified seat load, N | 1100 | 1600 | 2000 | N/A |
| | | Specified backrest load, N | --- | 410 | 560 | |
| | | Minimum specified force F2 (back), N | --- | 360 | 500 | |
| | | Cycles | 10 | 10 | 10 | |
| | | Additional cycle 30 min ± 10 s | 1 | 1 | 1 | |
| 2. Additional seat and leg rest static load test | EN 1728:2013, 8.3 | Seat load on loading point, N | 750 | 750 | 750 | N/A |
| | | Force applied on D-E point, N | 600 | 900 | 900 | |
| 3. Seat and back durability test | EN 1728:2013, 8.4.1 | Specified seat load, N | 750 | 1000 | 1000 | N/A |
| | | Specified backrest load, N | 250 | 333 | 333 | |
| | | Minimum specified force F4 (back), N | 220 | 300 | 300 | |
| | | Cycles | 12500 | 12500 | 12500 | |
| 4. Additional seat durability test | EN 1728:2013, 8.4.2 | Specified force, N | 750 | 1000 | 1000 | N/A |
| | | Cycles | 5000 | 10000 | 20000 | |
| 5. Durability test | EN 1728:2013, | Specified force, N | 190 | 250 | 250 | N/A |

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| Test | References | Test Parameters | | | | Results |
|-------------------------------------|---------------------|-----------------------------|---------|----------|----------|---------|
| | | Items | Camping | Domestic | Contract | |
| on back rest mechanism | 8.5 | Seat load, N | 1000 | 1000 | 1000 | |
| | | Cycles | 5000 | 10000 | 20000 | |
| 6. Arm rest static load test | EN 1728:2013, 8.6 | Vertical specified Force, N | --- | 700 | 900 | N/A |
| 7. Arm rest durability test | EN 1728:2013, 8.7 | Specified force, N | 400 | 400 | 400 | N/A |
| | | Cycles | 5000 | 10000 | 30000 | |
| 8. Impact test | EN 1728:2013, 8.8 | Drop height, mm | 140 | 180 | 240 | N/A |
| | | Cycles | 10 | 10 | 10 | |
| 9. Lifting test for mobile loungers | EN 1728:2013, 8.9 | Load, N | 1000 | 1000 | 1000 | N/A |
| | | Cycles | 500 | 1000 | 2000 | |
| 10. Forward stability | EN 581-2:2012 A.1.2 | | | | | N/A |
| 11. Rearward stability | EN 1022:2005 | | | | | N/A |
| 12. Sideways stability | EN 581-2:2012 A.1.1 | | | | | N/A |

Table 2 — Test sequence and test parameters for other seating

| Test | References | Test Parameters | | | | Results |
|---|--------------------|--|---------|----------|----------|-----------------------------------|
| | | Items | Camping | Domestic | Contract | |
| 1. Seat and back static load test | EN 1728:2013, 6.4 | Specified seat load, N | 1100 | 1600 | 2000 | Seat Static load test, 200kg PASS |
| | | Load applied on seat not being tested, N | 750 | 750 | 750 | |
| | | Specified backrest load, N | --- | 410 | 560 | |
| | | Minimum specified force F2 (back), N | --- | 360 | 500 | |
| | | Cycles | 10 | 10 | 10 | |
| | | Additional cycle 30 min ± 10 s | 1 | 1 | 1 | |
| 2. Seat front edge static load | EN 1728:2013, 6.5 | Specified force, N | 1100 | 1300 | 1300 | N/A |
| | | Seat load, N | 750 | 750 | 750 | |
| | | Cycles | 10 | 10 | 10 | |
| 3. combined Seat and back durability test | EN 1728:2013, 6.17 | Specified seat load, N | 1000 | 1000 | 1000 | N/A |
| | | Seat load, N | 750 | 750 | 750 | |
| | | Specified backrest load, N | 250 | 333 | 333 | |
| | | Minimum specified force F4 (back), N | 220 | 300 | 300 | |
| | | Cycles | 12500 | 25000 | 25000 | |
| 4. Durability test on seating with a | EN 1728:2013, 6.19 | Seat load, N | 750 | 750 | 750 | N/A |
| | | Specified force, N | 190 | 250 | 250 | |

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| Test | References | Test Parameters | | | | Results |
|----------------------------------|--------------------|--------------------------------|---------|----------|----------|---------|
| | | Items | Camping | Domestic | Contract | |
| multi-position back rest | | Cycles | 5000 | 10000 | 20000 | |
| 5. Arm rest static load test | EN 1728:2013, 6.11 | Vertical specified Force, N | --- | 700 | 900 | N/A |
| 6. Arm rest durability test | EN 1728:2013, 6.20 | Specified force, N | 400 | 400 | 400 | N/A |
| | | Cycles | 5000 | 10000 | 30000 | |
| 7. Leg forward static load test | EN 1728:2013, 6.15 | Seat load, N | 750 | 1000 | 1000 | N/A |
| | | Horizontal specified forces, N | 250 | 300 | 400 | |
| | | Minimum specified force, N | 150 | 175 | 250 | |
| | | Cycles | 10 | 10 | 10 | |
| 8. Leg sideways static load test | EN 1728:2013, 6.16 | Seat load, N | 750 | 1000 | 1000 | N/A |
| | | Horizontal specified forces, N | 200 | 300 | 300 | |
| | | Minimum specified force, N | 150 | 175 | 200 | |
| | | Cycles | 10 | 10 | 10 | |
| 9. Seat impact test | EN 1728:2013, 6.24 | Drop height, mm | 140 | 180 | 240 | N/A |
| | | Cycles | 10 | 10 | 10 | |
| 10. Foot rest static test | EN 1728:2013, 6.8 | Vertical specified force, N | --- | 1000 | 1200 | N/A |
| | | Cycles | 10 | 10 | 10 | |
| 11. Forward stability | EN 1022 | | | | | N/A |
| 12. Rearward stability | EN 1022 | | | | | N/A |
| 13. Sideways stability | EN 1022 | | | | | PASS |

Note:

- 1, N/A = not applicable
- 2, N/R = not required
- 3, PASS = meet with the requirements
- 4, FAIL = not meet with the requirements

***** To be continued *****

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SAMPLE IMAGE



Tested specimen



***** END OF REPORT *****