HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD
HUANGHOU VILLAGE,ZHENGLONG TOWN, HUIYANG DISTRICT, HUIZHOU CITY,GUANGDONG PROVINCE

| | |
|---|---|
| Sample Description | : DINING CHAIR |
| Item No. | : PABLO |
| Style No. | : 12610024-01/02/03/04 |
| SKU No. | : NIO6,NIO2 |
| Buyer | : BDSK HANDELS GMBH & CO. KG |
| Manufacturer | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |
| Supplier | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |
| Country of Origin | : CHINA |
| Country of Destination | : GERMANY |

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

**********

| | |
|---|---|
| Sample Receiving Date | : Apr 26, 2024 |
| Test Performing Date | : Apr 26, 2024 to May 23, 2024 |
| Test Performed | : Selected test(s) as requested by applicant |
| Test Result(s) | : For further details, please refer to the following page(s) |

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Scan to see the report
GZHL2404016189HI
Verification:
check.sgsonline.com.cn

Arthur Mak
Authorized Signatory



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

## I. Chemical Test

| | Test Requirement | Conclusion |
|---|---|---|
| 1 | German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Formaldehyde emissions from coated and uncoated wood based on Annex 1 of the Chemical Prohibition Ordinance (ChemVerbotsV), Federal Gazette, November 26, 2018 - Formaldehyde Emissions | Pass |
| 2 | Client's requirement - Pentachlorophenol (PCP) | Pass |
| 3 | Client's requirement - Bisphenol A(BPA) | Pass |
| 4 | Client's requirement - Hexabromocyclododecane (HBCDD) | Pass |
| 5 | Client's requirement - Polycyclic Aromatic Hydrocarbons(PAHs) | Pass |
| 6 | Client's requirement - Nickel Release | Pass |
| 7 | Client's requirement - Short Chain Chlorinate Paraffin(SCCP)(C10-C13) | Pass |
| 8 | Client's requirement - Pesticides | Pass |
| 9 | Client's requirement - Lead (Pb) & Cadmium (Cd) | Pass |
| 10 | Client's requirement - Dimethyl fumarate (DMFu) | Pass |

**Test Result(s):**

Test Part Description：

| SN ID | Sample No. | SGS Sample ID | Description |
|---|---|---|---|
| SN6 | A6 | CAN24-0008333-0001.C006 | Black powder(used for coating) |
| SN7 | A7 | CAN24-0008333-0001.C007 | Black plastic |
| SN8 | A8 | CAN24-0008333-0001.C008 | White sponge |
| SN9 | A9 | CAN24-0008333-0001.C009 | Brown HWPW-VC |
| SN10 | A10 | CAN24-0008333-0001.C010 | Silvery metal(iron) |
| SN12 | A12 | CAN24-0008333-0001.C012 | Black surfaced metal(round pipe) |

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated

**German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Formaldehyde emissions from coated and uncoated wood based on Annex 1 of the Chemical Prohibition Ordinance (ChemVerbotsV), Federal Gazette, November 26, 2018 - Formaldehyde Emissions**

Test Method: With reference to DIN EN 16516:2018, analysis was performed by HPLC-DAD.

| Test Item(s) | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|
| Chamber Volume | - | $m^3$ | - | 0.05 |
| Sample loading | - | $m^2/m^3$ | - | 1.8 |
| Testing Temperature | - | °C | - | 23.8 |
| Testing Humidity | - | % | - | 50.7 |
| Air Exchange Rate | - | /h | - | 0.5 |
| Test Period Time | - | day | - | 7 |
| DNPH Sampling Flow | - | mL/min | - | 300 |
| DNPH Sampling Time | - | min | - | 60 |
| DNPH Sampling Volume | - | L | - | 18 |
| Formaldehyde Emission | 0.1 | ppm | 0.01 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) ppm = parts per million
(2) $mg/m^3$ = milligram per cubic meter
(3) At 23℃ and 1013hPa, 1ppm = 1.24$mg/m^3$, 1$mg/m^3$=0.81ppm.

**Pentachlorophenol (PCP)**

Test Method: With reference to modified § 64 LFGB BVL B82.02.8-2001 with KOH Extraction, analysis was performed by GC-MS or GC-ECD.

| Test Item(s) | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|
| Pentachlorophenol (PCP) | 5 | mg/kg | 0.05 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Bisphenol A(BPA)**

Test Method: With reference to AFIRM RSL method by solvent extraction, analysis was performed by LC-DAD/MS / LC-MS/MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 |
|---|---|---|---|---|---|---|
| Bisphenol A(BPA) | 80-05-7 | 1000 | mg/kg | 0.1 | ND | 127.6 |
| **Conclusion** | | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Hexabromocyclododecane (HBCDD)**


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Method: With reference to IEC 62321-9:2021, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A7 |
|---|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6 | 1000 | mg/kg | 20 | ND |
| **Conclusion** | | | | | **Pass** |

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6 | 1000 | mg/kg | 20 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Polycyclic Aromatic Hydrocarbons(PAHs)**

Test Method: With reference to AfPS GS 2019:01 PAK, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 | A10 |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene(BaP) | 50-32-8 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(e)pyrene(BeP) | 192-97-2 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(a)anthracene(BaA) | 56-55-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(b)fluoranthene(BbF) | 205-99-2 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(j)fluoranthene(BjF) | 205-82-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(k)fluoranthene(BkF) | 207-08-9 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Chrysene(CHR) | 218-01-9 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Dibenzo(a,h)anthracene(DBA) | 53-70-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(g,h,i)perylene(BPE) | 191-24-2 | - | mg/kg | 0.1 | ND | ND | ND |
| Indeno(1,2,3-c,d)pyrene(IPY) | 193-39-5 | - | mg/kg | 0.1 | ND | ND | ND |
| Phenanthrene(PHE) | 85-01-8 | - | mg/kg | 0.1 | ND | ND | ND |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 | A10 |
|---|---|---|---|---|---|---|---|
| Pyrene(PYR) | 129-00-0 | - | mg/kg | 0.1 | ND | ND | ND |
| Anthracene(ANT) | 120-12-7 | - | mg/kg | 0.1 | ND | ND | ND |
| Fluoranthene(FLT) | 206-44-0 | - | mg/kg | 0.1 | ND | ND | ND |
| Naphthalene(NAP) | 91-20-3 | - | mg/kg | 0.1 | ND | ND | ND |
| Acenaphthylene(ANY) | 208-96-8 | - | mg/kg | 0.1 | ND | ND | ND |
| Acenaphthene(ANA) | 83-32-9 | - | mg/kg | 0.1 | ND | ND | ND |
| Fluorene(FLU) | 86-73-7 | - | mg/kg | 0.1 | ND | ND | ND |
| Sum of 18 PAHs | - | 50 | mg/kg | - | ND | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Nickel Release**

Test Method: With reference to EN 1811:2023, analysis was performed by ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A12-Trial1 | A12-Trial2 | A12-Trial3 |
|---|---|---|---|---|---|---|
| Volume of Test Solution | - | mL | - | 41.63 | 41.63 | 41.63 |
| Sample Area | - | $cm^2$ | - | 41.63 | 41.63 | 41.63 |
| Whether performed by EN 12472:2020 or not | - | - | - | YES | YES | YES |
| Nickel Release | 0.5 | $\mu g/cm^2$/ week | 0.10 | ND | ND | ND |
| **Conclusion** | | | | **Pass** | | |

**Notes:**
(1) NO: Positive finding by Nickel spot test is observed based on CEN/TR 12471:2022. Simulation of wear and corrosion according to EN 12472:2020 has been not applied prior to the EN 1811:2023.
YES: Negative finding by Nickel spot test is observed based on CEN/TR 12471:2022. Simulation of wear and corrosion according to EN 12472:2020 has been applied prior to the EN 1811:2023.
(2) The maximum permissible limit is quoted from the client requirement.

**Short Chain Chlorinate Paraffin(SCCP)(C10-C13)**

Test Method: With reference to ISO 22818:2021,analysis was performed by GC-NCI-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Short Chain Chlorinated Paraffin(C10- | 85535-84-8 | 1000 | mg/kg | 50 | ND |

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| C13)(SCCP) | | | | | |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Pesticides**

Test Method: With reference to SGS in house method, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|---|
| HCH, including lindane | 319-84-6 /319-85-7 /58-89-9 /608-73-1 | 0.05 | mg/kg | 0.05 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Lead (Pb) & Cadmium (Cd)**

Test Method: With reference to EN 1122:2001 Method B, analysis was performed by AAS or ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A7 | A8 |
|---|---|---|---|---|---|
| Cadmium(Cd) | 100 | mg/kg | 5 | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

Test Method: With reference to CPSC-CH-E1001-08.3, analysis was performed by AAS/ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A10 |
|---|---|---|---|---|
| Lead(Pb) | 500 | mg/kg | 20 | ND |
| Cadmium(Cd) | 100 | mg/kg | 5 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

Test Method: With reference to CPSC-CH-E1003-09.1, analysis was performed by AAS/ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A6 |
|---|---|---|---|---|


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | Limit | Unit(s) | MDL | A6 |
|---|---|---|---|---|
| Lead(Pb) | 500 | mg/kg | 20 | ND |
| Cadmium(Cd) | 100 | mg/kg | 5 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Dimethyl fumarate (DMFu)**

Test Method: Solvent extraction, analysis was performed by GC-MS.

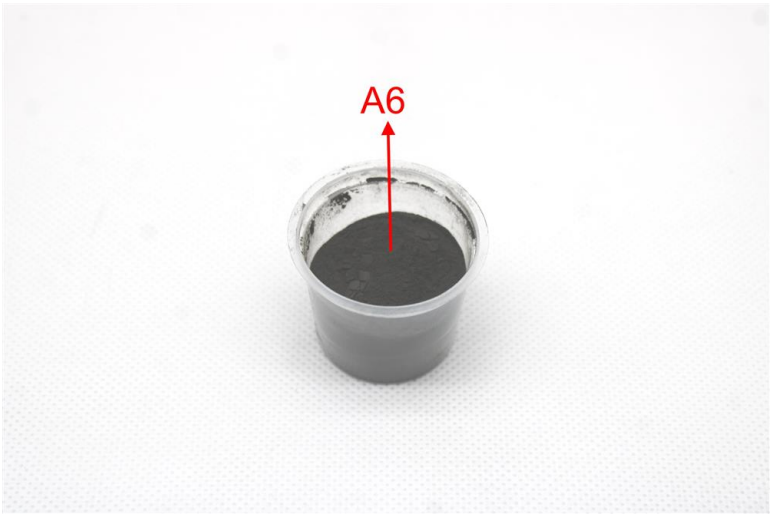
| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Dimethyl Fumarate (DMFu) | 624-49-7 | 0.1 | mg/kg | 0.1 | ND |
| **Conclusion** | | | | | **Pass** |

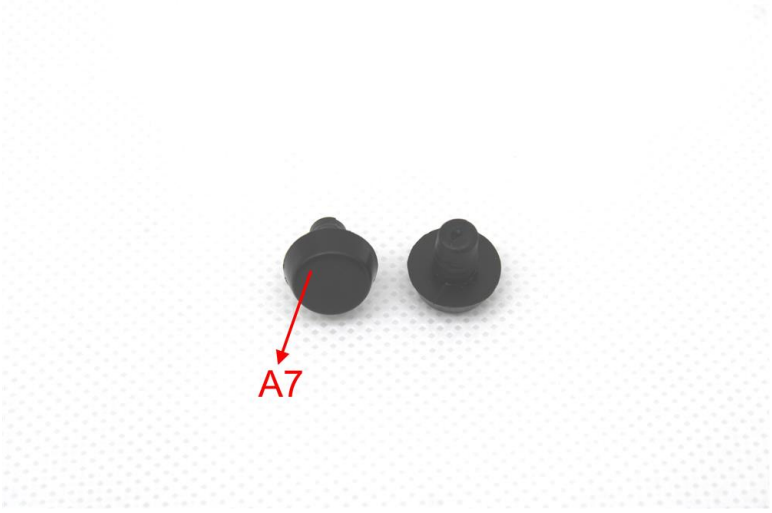
**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.
Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

Remark:
The content of this part is extracted from the test report number GZHL2401001673HI.


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

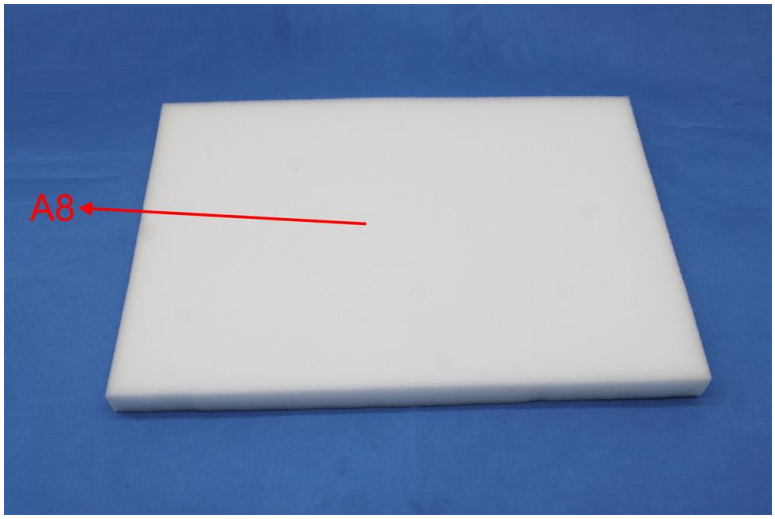
**Sample Photo:**

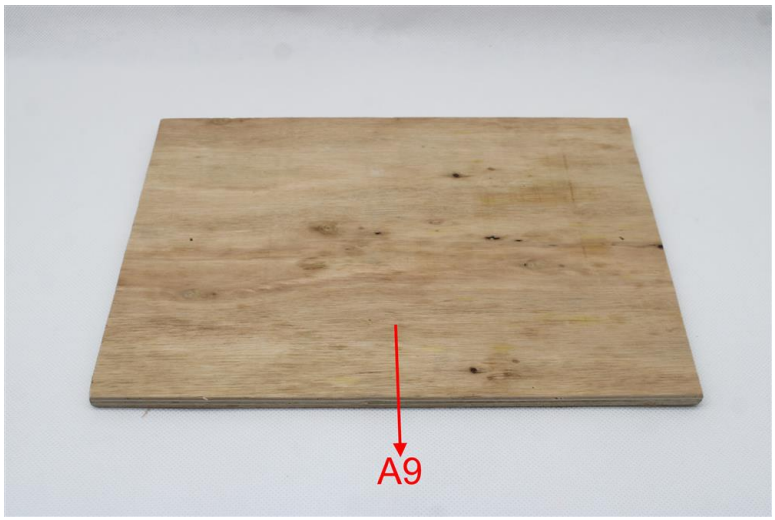




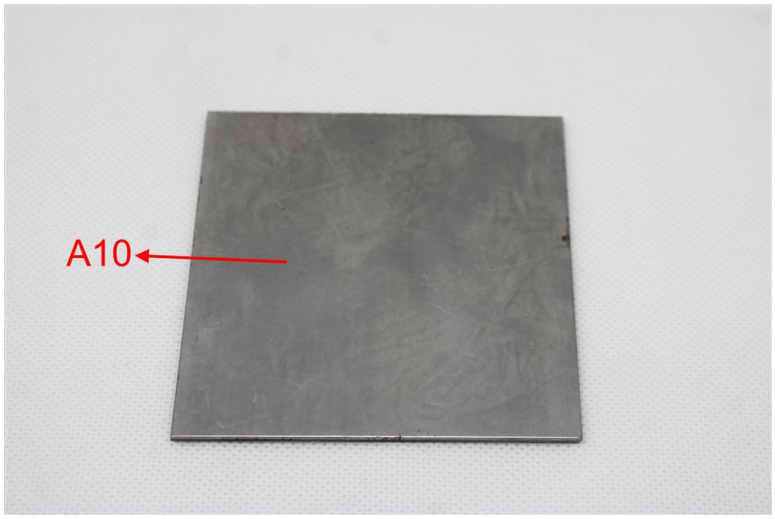
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com





SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com







SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**II. SGS Ref No.: SDHL2404007250FT**

This test was subcontracted to SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch.

**Test Result Summary**

| No. | Test(s) Requested | Result(s) | Comments |
|---|---|---|---|
| 1 | EN 12520:2015, excluding information for use | PASS | / |

**TESTS AND RESULTS**

**Test Conducted:**
EN 12520:2015 Furniture — Strength, durability and safety -- Requirements for domestic seating, excluding information for use.

**No. of Sample:**
1 piece (Sample #1). For more sample information and pictures, please refer to the following page.

| Test and Requirements | Test Results |
|---|---|
| **5 Constructional requirements** | |
| **5.1 General requirements**<br>- Edges of the seat, back rest and arm rests, which are in contact with the user when sitting are rounded or chamfered. All other edges accessible during use shall be free from burrs and/or sharp edges;<br>- Ends of hollow components are closed or capped.<br>- Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.<br>- It shall not be possible for any load bearing part of the seating to come loose unintentionally.<br>- All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use. | PASS |
| **5.2 Shear and squeeze points** | |
| **5.2.1 Shear and squeeze points when setting up and folding**<br>Unless 5.2.2 or 5.2.3 are applicable, shear and squeeze points, that are created only during setting up and folding, including tipping seat, are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain. The edges of parts moving relative to each other and creating shear and squeeze points shall be as specified in 5.1. | N/A |
| **5.2.2 Shear and squeeze points under the influence of powered mechanisms**<br>With the exception of tipping seats there shall be no shear and squeeze points created by parts of the seating under powered mechanisms, e.g. springs and gas lifts.<br>*NOTE Electrically operated seating is covered by EEC Directives for EMC, Machinery, Low Voltage or Medical Devices.* | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **5.2.3 Shear and squeeze points during use**<br>There shall be no shear and squeeze points created by loads applied during normal use. The loads applied during normal use can be found in Table 1. Shear and squeeze points are not acceptable if a hazard is 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.<br>*NOTE This hazard is best prevented by the use of automatic locking mechanisms.* | PASS |
| **5.3 Stability**<br>The seating shall fulfil the relevant requirements of EN 1022: 2023. | |
| **EN 1022: 2023, 7 Test methods for assessing stability of all seating except loungers**<br>The stability tests defined in Clause 7 are not applicable to seating which has both the height of the seat loading point < 200 mm and a mass < 5 kg.<br>When tested according to 7.3 and 7.4, the seating shall not overturn. | |
| **EN 1022: 2023, 7.3.1 Forwards overturning**<br>$F_1$= 600 N<br>$F_2$= 20 N<br>For seating with multiple seats simultaneously apply the forces at the two positions most likely to cause overturning. | PASS |
| **EN 1022: 2023, 7.3.2 Forwards overturning for seating with foot rest**<br>$F_1$= 1100 N (single column seats) or 600 N (all other seating)<br>$F_2$= 20 N | N/A |
| **EN 1022: 2023, 7.3.3 Corner stability test**<br>$F_1$= 300 N<br>For seating with multiple seats apply a force $F_1$= 300 N at the loading point on one outside seating position. | N/A |
| **EN 1022: 2023, 7.3.4 Sideways overturning, all seating without arm rests**<br>$F_1$= 600 N<br>$F_2$= 20 N | N/A |
| **EN 1022: 2023, 7.3.5 Sideways overturning, all other seating**<br>This test is applicable to all seating with arms, or where the top edge of the seat on the transverse plane is more than 50 mm above the height of the seat loading point (A). | |
| **EN 1022: 2023, 7.3.5.2 Seating with arm rests**<br>$F_1$= 250 N<br>$F_2$= 350 N<br>$F_3$= 20 N | PASS |
| **EN 1022: 2023, 7.3.5.3 Seating with raised edges**<br>$F_1$= 250 N<br>$F_2$= 350 N<br>$F_3$= 20 N | N/A |
| **EN 1022: 2023, 7.3.6 Rearwards overturning all seating with back rests**<br>$F_1$= 600 N<br>$H \geqslant 720$ mm, $F_2 = 80$ N;<br>300 mm $\leqslant H < 720$ mm, $F_2 = 0.2857\ (1000 - H)$;<br>$H < 300$ mm, $F_2 = 200$ N. | PASS |
| **EN 1022: 2023, 7.4 Additional test procedures for seating with reclining back rests** | |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1022: 2023, 7.4.2 Tilting seating**<br>Load the seat with the 13 (single column seats) or 11 (all other seating) loading discs so that the discs are firmly settled against the back rest. | PASS |
| **EN 1022: 2023, 7.4.3 Reclining seating with leg rest**<br>Number of discs – back: 8<br>Number of discs – leg rest: 3 | N/A |
| **EN 1022: 2023, 7.4.4 Reclining seating without leg rest**<br>Number of discs – back: 8<br>Number of balancing discs: 3 | N/A |
| **EN 1022: 2023, 7.4.5 Rearwards stability test for rocking chairs**<br>Number of discs: - (single column seats) or 8 (all other seating)<br>Move the chair forwards as far as is practicable or until the back is vertical.<br>Allow the chair to rock rearwards freely under gravity. | N/A |
| **EN 1022: 2023, 8 Loungers**<br>The stability tests defined in Clause 8 are not applicable to loungers which have both a seat height < 200 mm and a mass < 5 kg.<br>When tested according to 8.3, the seating shall not overturn. | |
| **EN 1022: 2023, 8.3.1 Forwards overturning**<br>$F_{B.3}$= 600 N<br>$F_{B.4}$= 20 N | N/A |
| **EN 1022: 2023, 8.3.2 Sideways overturning**<br>$F_{B.1}$=600 N<br>If the arm rest is more than 400 mm in length apply additional vertical force<br>$F_{B.2}$= 250 N in the centre of the arm rest. | N/A |
| **EN 1022: 2023, 8.3.3 Rearwards stability – Upright position**<br>$F_1$= 600 N<br>H ⩾ 720 mm, $F_2$ = 80 N;<br>H ＜ 720 mm, $F_2$ = 0.2857 (1000 – H). | N/A |
| **EN 1022: 2023, 8.3.4 Rearwards stability – Recline position**<br>Number of discs – back: 8<br>Number of discs – leg rest: 3 | N/A |
| **5.4 Strength and durability (With reference to the test methods of EN 1728:2012/AC:2013 D/E/F)**<br>Seating shall be tested for strength and durability according to and in the order as below.<br>The strength and durability requirements are fulfilled when during and after testing as below.<br>a) there are no fractures of any member, joint or component;<br>b) there are no loosening of joints intended to be rigid;<br>c) seating fulfils its functions after removal of the test loads;<br>d) seating fulfils the stability requirements. | |



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.4 Seat and Back Static Load Test**<br>Apply the downward force Fv at the seat loading position. With the downward force maintained, apply the back force $F_H$ at back loading position. Remove the back load and then the seat load. Seating with a fixed back position, and seating with reclining mechanisms that cannot be locked into a fixed position, shall be tested for the number of 10 cycles; Seating with reclining mechanisms that can be set or locked in a number of positions shall be tested for 5 cycles in the most upright position, and 5 cycles in the most adverse reclined position. The force Fv and $F_H$ are decided by following rules:<br>When ∅min ⩾70°, Fv=1300N, $F_H$= 450N;<br>When 55°⩽∅min＜70°,<br>Fv = 1300N x sin∅min<br>$F_H$ = (∅/60° - 0.1666) x 1300N x cos∅min<br>When ∅min＜55°,<br>Fv = 975N<br>$F_H$ = 975N x cos∅min<br><br>*Note: Only the vertical seat static force shall be applied to items without a back rest.*<br>*Minimum back force, 410 N.*<br>*Load applied to seats not being tested, 750 N.* | PASS |
| **EN 1728, 6.5 Seat front edge static load**<br>Apply the vertical force of 1300N using the seat loading pad at a point on the seat centre line 100 mm inwards from the front edge of the structure.<br>For multiple seating units, the seat front edge static load test shall be carried out simultaneously on the same seats as used for the seat and back static load test (6.4).<br>During the test, load the seat(s) that are not being tested with the specified seat load for parts not undergoing test, applied at the seat loading position. Repeat above operation for 10 cycles.<br>*Note: Load applied to seats not being tested, 750 N.* | PASS |
| **EN 1728, 6.8 Foot rest static load test**<br>Apply the specified downward force to the seat at the seat loading point.<br>Apply a vertical force of 1000N by means of the local loading pad (D = 100mm) acting 80 mm from front edge of the load bearing structure of the foot rest at those points most likely to cause failure. For round cross section ring shaped footrests, the force shall be applied through the centre of the ring cross section. Repeat above operation for 10 cycles.<br>*Note: This test is only applicable to seating with a seat height greater than 600 mm.*<br>*Minimum seat force, 750 N.* | N/A |
| **EN 1728, 6.10 Arm rest sideways static load test**<br>For seating with one arm rest, apply an outward force of 300N to the arm rest at the point along the arm rest most likely to cause failure, but not less than 100 mm from the end of the arm rest structure. Apply the force using the local loading pad (D = 100mm).<br>For seating with two arm rests, apply an outward force to each arm rest of the unit simultaneously.<br>For seating with three or more arm rests, carry out the test on one pair of adjacent arm rests. All different arm rest designs shall be tested.<br>Repeat above operation for 10 cycles. | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.11 Arm rest downwards static load test**<br>For seating which only has one arm rest, or which has two arm rests where the distance between the centre of the arm rests is more than 1000 mm, apply the vertical force 700N at the points along the arm rest most likely to cause failure, but not less than 100 mm from the end of the arm rest structure.<br>For seating with two arm rests, where the distance between the centre of the arm rests is 1 000 mm or less, apply the vertical force simultaneously to both arm rests.<br>For seating with three or more arm rests, carry out the test on one pair of adjacent arm rests. All different arm rest designs shall be tested. Repeat above operation for 10 cycles.<br>*Note: Loading pad: D = 200 mm or 100mm.* | PASS |
| **EN 1728, 6.17 Combined seat and back durability test**<br>Apply the downward force Fv at the seat loading position. With the downward force maintained, apply the back force $F_H$ at back loading position. Remove the back load and then the seat load. Seating with a fixed back position, and seating with reclining mechanisms that cannot be locked into a fixed position, shall be tested for the number of 25000 cycles; Seating with reclining mechanisms that can be set or locked in a number of positions shall be tested for 12500 cycles in the most upright position, and 12500 cycles in the most adverse reclined position. The force Fv and $F_H$ are decided by following rules:<br>When ∅min ⩾70°, Fv=1000N, $F_H$= 300N;<br>When 55°⩽∅min＜70°,<br>Fv = 1000N x sin∅min<br>$F_H$ = (∅/60° - 0.1666) x 1000N x cos∅min<br>When ∅min＜55°,<br>Fv = 750N<br>$F_H$ = 750N x cos∅min<br>*Note: The minimum back force is the force that just prevents rearward overturning.*<br>*Only the vertical seat durability force shall be applied to items without a back rest.*<br>*Load applied to seats not being tested, 750 N.* | PASS |
| **EN 1728, 6.18 Seat front edge durability test**<br>Apply the vertical seat durability force Fv = 800N using the smaller seat loading pad alternately on two points each 80 mm from the front edge of the seat structure and as near as possible to either side of the seat but not less than 80 mm from the edges. One cycle is one application of the specified force to each load position. For seating where it is not possible to apply the force at two points, the force shall be applied to a single position on the longitudinal axes at a point 80 mm from the front edge of the seat structure. One cycle is two applications of the specified force.<br>Repeat above operation for 20000 cycles.<br><br>*Note: In derogation of EN 1728:2012 the loading points shall be 80 mm from the relevant edges of the seat.* | PASS |



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.20 Arm rest durability test**<br>The test load of 400 N shall be applied simultaneously on two points for 10000 cycles, at the point most likely to cause failure, but not less than 100 mm from the front or rear edge of the arm rest length and through the centre of the width of the arm rest, but not more than 100 mm from the inner edge of the arm rest.<br>The force shall be applied at an angle of (10 ± 1)° to the vertical, and to both arm rests simultaneously for seating with only one seating position and to one arm rest only for seating with multiple seating positions. | PASS |
| **EN 1728, 6.15 Leg forward static load test**<br>For seating with a single seat, apply the seat load Fv = 1000 N at the seat loading position. Apply the horizontal force FH = 400 N (max.) centrally to the rear of the seat, at seat level, in a forward direction, by means of the local loading pad (D=100mm).<br>For seating with multiple seating positions, apply the horizontal force of the most adverse seat position.<br>For seating with only three legs, one foot on the fore and aft centre line of the item of seating and one other foot shall be restrained by stops.<br>Repeat above operation for 10 times. | N/A |
| **EN 1728, 6.16 Leg sideways static load test**<br>Apply the seat load Fv = 1000 N at any position not more than 150mm from the unload edge of the seat. Apply a horizontal force $F_H$ = 300 N (max.) centrally to the unrestrained side of the seat, at seat level, in a direction towards the restrained feet. For seating with only three legs, one foot on the fore and aft centre line of the item of seating and one other foot shall be restrained by stops. Repeat above operation for 10 times. | N/A |
| **EN 1728, 6.24 Seat Impact Test**<br>Allow the seat impactor to fall freely from the height of 180 mm onto the seat loading position. Repeat the test at one other position considered likely to cause failure, but not less than 100 mm from any edge of the seat. For multiple seating units, apply the test to one end seat and an intermediate seating position. Repeat above operation for 10 times. | PASS |
| **EN 1728, 6.28 Backwards Fall Test**<br>Place the unloaded seating on the drop test floor in normal use position.<br>Apply a rearward horizontal load to a point 50 mm below the top of the back rest in the centre of the back rest.<br>Measure the force required to lift the front legs off the floor.<br>If the measured force is less than FH < 30N, push the top of the back rest rearwards until it reaches the equilibrium point. Allow it to fall freely on its back, onto the rubber faced test floor, without initial force or velocity.<br>Repeat the operation for 5 cycles.<br>*Note: This test is only for single seating units where the back will be the first part of the structure to strike the floor and the force used to overturn the chair rearwards is FH < 30 N.* | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.25 Back Impact Test**<br>Prevent the chair form movement by stops against the front leg. Allow the impact hammer (8.5 kg) to fall freely from the height H = 120 mm or an angel θ = 28° onto the center of the top outside of the chair back for 10 times. If the item has no back, strike the centre of the seat rear edge. If a stool or bench has no easily determined rear edge, apply the test in the direction most likely to cause failure.<br>*Note: This test is for all seating not tested in accordance with Backward fall test (EN 1728, 6.28).* | N/A |
| **6 Information for use**<br>Information for use shall be available in the language of the country in which it will be delivered to the end user.<br>It shall contain at least the following details:<br>a) assembly instructions, where applicable;<br>b) instructions for the care and maintenance of the seating;<br>c) 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 |

**Remark:**

1. N/A – Not applicable; N/R – Not requested; N/P – Not provided.
2. For the sample information and pictures, please refer to the following page.



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

## SAMPLE INFORMATION AND PICTURES

**Weight:** 14.7 kg

**Overall Dimensions:** 670 mm D x 625 mm W x 925 mm H

**Other Dimensions:** /

**Sample as Received**

View 1

View 2

View 3

View 4

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w$=0) stated in ILAC-G8:09/2019.

***End of Report***


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

# Zertifikat *Certificate*

TÜVRheinland®

**Zertifikat Nr.** *Certificate No.*
R 50552194

**Blatt** *Sheet*
0001

| **Ihr Zeichen** *Client Reference* | **Unser Zeichen** *Our Reference* | **Ausstellungsdatum** | *Date of Issue* |
|---|---|---|---|
| | 01-SLJ-SHI50101 001 | 22.08.2022 | *(day/mo/yr)* |

**Genehmigungsinhaber** *License Holder*
Hugein Gas Spring Co., Ltd.
Zhongchong Industrial Zone,
Leliu, Shunde
Foshan,
528300 Guangdong
P.R. China

**Fertigungsstätte** *Manufacturing Plant*
Hugein Gas Spring Co., Ltd.
Zhongchong Industrial Zone,
Leliu, Shunde
Foshan,
528300 Guangdong
P.R. China

**Prüfzeichen** *Test Mark*

TÜVRheinland® CERTIFIED
Type Approved
Safety
Regular Production
Surveillance
www.tuv.com
ID 1111257112

**Geprüft nach** *Tested acc. to*
EN 16955:2017

**Zertifiziertes Produkt (Geräteidentifikation)**
***Certified Product (Product Identification)***

**Lizenzentgelte - Einheit**
***License Fee - Unit***

Tapered pressure tubes

Type Designation: YJ-03 — 5
Base Material: 20# steel according to GB/T 3639-2009
Outside Diameter: 28 mm
Wall Thickness: 2.0 mm
Surface Finish: Hard chrome plated

Strength Class: Class 3

Remark:
This license will be valid until 2026-06-14.
Before expiry date, a performance test acc. EN 16955:2017
must be performed for the license validity renewal.
This license refers to test report No.94629871-05 and
SHI50101 001.

5

ANLAGE (Appendix): 1

*Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.*
*This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.*

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

**Zertifizierungsstelle**

Ming Shan

**TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg**
http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

**Ming Shan**

**TÜV Rheinland (China) Ltd.**
Member of TÜV Rheinland Group

TÜVRheinland®
Precisely Right.

Hugein Gas Spring Co., Ltd.

Date : 22.08.2022
Our ref. : SLJ 01
Your ref.:

Zhongchong Industrial Zone,
Leliu, Shunde
Foshan,
528300 Guangdong
P.R. China

**Ref : R TÜV-Mark Approval**

Type of Equipment : Tapered pressure tubes
Model Designation : See Certificate
Certificate No. : R 50552194 0001
Report No. : SHI50101 001

Dear Ladies and Gentlemen,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body

Ming Shan

cc: Hugein Gas Spring Co., Ltd.

Enclosure



**TÜV Rheinland (China) Ltd.**
莱茵检测认证服务（中国）有限公司

No. 01/03B-08, Floor 7 and No. 01/04B-08, Floor 11, AVIC Building, No.10B, Central Road, East 3rd Ring Road, Chaoyang District, Beijing, P.R. China

北京市朝阳区东三环中路乙10号艾维克大厦第7层第01、03B-08号，第11层第01、04B-08号
邮编：100022

Tel: (8610)8524 2222
Fax: (8610)8524 2200
e-mail: info@bj.chn.tuv.com
Internet: http://www.chn.tuv.com

HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD
HUANGHOU VILLAGE,ZHENGLONG TOWN, HUIYANG DISTRICT, HUIZHOU CITY,GUANGDONG PROVINCE

Sample Descriptions : LEATHER

Style No.(s) : 12610024-28/29/30 & 12610013-05

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

**********

Sample Receiving Date : Aug 01, 2025

Test Performing Date : Aug 01, 2025 to Aug 14, 2025

Test Performed : Selected test(s) as requested by applicant

Test Result(s) : For further details, please refer to the following page(s)

| | Test Requirement | Conclusion |
|---|---|---|
| 1 | Entry 43 of Regulation (EU) 2020/2096 amending Annex XVII of REACH Regulation (EC) No 1907/2006- AZO Dyes | Pass |
| 2 | Entry 46 of Regulation (EU) 2020/2096 amending Annex XVII of REACH Regulation (EC) No 1907/2006 - Nonylphenol Ethoxylates (NPEOs) and Nonylphenol (NP) | Pass |
| 3 | Entry 47 of Commission Regulation (EU) No 301/2014 amending Annex XVII to Regulation (EC) No 1907/2006 –Chromium (VI) Content | Pass |
| 4 | Entry 61 of Regulation (EU) No 412/2012 amending Annex XVII of REACH Regulation (EC) No 1907/2006 - Dimethyl fumarate (DMF) | Pass |
| 5 | Entry 72 of Regulation (EU) 2018/1513 amending Annex XVII of REACH Regulation (EC) No 1907/2006- Carcinogenic, mutagenic and reprotoxic (CMR) substances - Free Formaldehyde | Pass |
| 6 | European Regulation POPs (EU) 2019/1021 Annex I– Alkanes $C_{10}$-$C_{13}$, chloro (short chain-chlorinated paraffins) (SCCPs) | Pass |
| 7 | European Regulation POPs (EU) 2021/277 amending Regulation (EU) 2019/1021 Annex I– Pentachlorophenol (PCP) and its salts and esters | Pass |
| 8 | Chlorinated Paraffins | Pass |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Joan Huang

Joan Huang
Authorized Signatory

Scan to see the report
GZHL250803206001FT
Verification:
check.sgsonline.com.cn


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**Test Result(s):**

Test Part Description：

| SN ID | Sample No. | SGS Sample ID | Description |
|---|---|---|---|
| SN1 | A1 | CAN25-0188656-0001.C001 | Gray leather("H2-1037") |
| SN2 | A2 | CAN25-0188656-0001.C002 | Beige leather with gray backing("H2-173") |
| SN3 | A3 | CAN25-0188656-0001.C003 | Khaki leather("H2-1040") |
| SN4 | A4 | CAN25-0188656-0001.C004 | Brown leather("H2-061") |
| SN5 | A1+A2 | CAN25-0188656-0002 | Gray leather("H2-1037")+ Beige leather with gray backing("H2-173") |
| SN6 | A3+A4 | CAN25-0188656-0003 | Khaki leather("H2-1040")+ Brown leather("H2-061") |

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated
(5) Composite test has been performed and the result(s) is/are calculated using the total mixed sample weight.

**Entry 43 of Regulation (EU) 2020/2096 amending Annex XVII of REACH Regulation (EC) No 1907/2006-AZO Dyes**

| Test Method |
|---|
| Leather: With reference to EN ISO 17234-1:2020, analysis was performed by GC-MS/HPLC-DAD. |

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| 4-Aminobiphenyl | 92-67-1 | 30 | mg/kg | 5 | ND | ND |
| Benzidine | 92-87-5 | 30 | mg/kg | 5 | ND | ND |
| 4-Chlor-o-toluidine | 95-69-2 | 30 | mg/kg | 5 | ND | ND |
| 2-Naphthylamine | 91-59-8 | 30 | mg/kg | 5 | ND | ND |
| o-Aminoazotoluene | 97-56-3 | 30 | mg/kg | 5 | ND | ND |
| 5-Nitro-o-Toluidine/2-Amino-4-Nitrotoluene | 99-55-8 | 30 | mg/kg | 5 | ND | ND |
| 4-Chloroaniline | 106-47-8 | 30 | mg/kg | 5 | ND | ND |
| 4-Methoxy-m-Phenylenediamine/2,4-Diaminoanisole | 615-05-4 | 30 | mg/kg | 5 | ND | ND |
| 4,4'-Diaminodiphenylmethane, MDA | 101-77-9 | 30 | mg/kg | 5 | ND | ND |
| 3,3'-Dichlorobenzidine | 91-94-1 | 30 | mg/kg | 5 | ND | ND |
| 3,3'-Dimethoxybenzidine | 119-90-4 | 30 | mg/kg | 5 | ND | ND |
| 3,3'-Dimethybenzidine | 119-93-7 | 30 | mg/kg | 5 | ND | ND |
| 4,4'-methylenedi-o-Toluidine/3,3'-Dimethyl-4,4'- | 838-88-0 | 30 | mg/kg | 5 | ND | ND |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| Diaminodiphenylmethane | | | | | | |
| p-Cresidine | 120-71-8 | 30 | mg/kg | 5 | ND | ND |
| 4,4'-Methylene-bis-(2-chloroaniline) | 101-14-4 | 30 | mg/kg | 5 | ND | ND |
| 4,4'-Oxydianiline | 101-80-4 | 30 | mg/kg | 5 | ND | ND |
| 4,4'-Thiodianiline | 139-65-1 | 30 | mg/kg | 5 | ND | ND |
| o-Toluidine | 95-53-4 | 30 | mg/kg | 5 | ND | ND |
| 4-Methyl-m-Phenylenediamine/2,4-Toluylendiamine, TDA | 95-80-7 | 30 | mg/kg | 5 | ND | ND |
| 2,4,5-Trimethylaniline | 137-17-7 | 30 | mg/kg | 5 | ND | ND |
| 4-Aminoazobenzene | 60-09-3 | 30 | mg/kg | 5 | ND | ND |
| O-Anisidine | 90-04-0 | 30 | mg/kg | 5 | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** |

**Notes:**
(1) EN ISO 17234-1:2020 will enable further cleavage of 4-AAB (CAS No. 60-09-3) to non-forbidden amines: aniline and p-phenylenediamine. If aniline and/or p-phenylenediamine is not found, 4-AAB is considered as "ND" (i.e. <5.0 mg/kg). Otherwise, EN ISO 17234-2:2011 will be employed to verify the presence of 4-AAB.
(2) The result interpretation and assessment guide according to Annex C of EN ISO 17234-1:2020 should be taken into account when assessing the source of amine.
(3)Test was conducted on composite of random parts of the item as per client's request and the test result is the overall result.

**Entry 46 of Regulation (EU) 2020/2096 amending Annex XVII of REACH Regulation (EC) No 1907/2006 - Nonylphenol Ethoxylates (NPEOs) and Nonylphenol (NP)**

**Test Method:** With reference to SGS in house method, analysis was performed by LC-MS.

| Test Item(s) | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|
| Nonylphenol ethoxylates(NPEOs) | 1000 | mg/kg | 10 | 45 | 50 |
| Nonylphenol (NP) | 1000 | mg/kg | 10 | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**Entry 47 of Commission Regulation (EU) No 301/2014 amending Annex XVII to Regulation (EC) No 1907/2006 –Chromium (VI) Content**

**Test Method:** With reference to ISO 17075-1:2017, analysis was conducted by UV-Vis.(Aging condition at 80 ℃ for 24 hour at < 5% relative humidity before Cr(VI) determination)

Ageing Condition: 80ºC for 24 hours <5% relative humidity

| Test Item(s) | Limit | Unit(s) | MDL | A1 | A2 | A3 |
|---|---|---|---|---|---|---|
| Hexavalent Chromium(CrVI) | 3 | mg/kg | 3.0 | ND | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** | **Pass** |

| Test Item(s) | Limit | Unit(s) | MDL | A4 |
|---|---|---|---|---|


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | Limit | Unit(s) | MDL | A4 |
|---|---|---|---|---|
| Hexavalent Chromium(CrVI) | 3 | mg/kg | 3.0 | ND |
| **Conclusion** | | | | **Pass** |

**Entry 61 of Regulation (EU) No 412/2012 amending Annex XVII of REACH Regulation (EC) No 1907/2006 - Dimethyl fumarate (DMF)**

**Test Method:** SGS In house method, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1 | A2 | A3 |
|---|---|---|---|---|---|---|---|
| Dimethyl Fumarate (DMF) | 624-49-7 | 0.1 | mg/kg | 0.1 | ND | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** | **Pass** |

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A4 |
|---|---|---|---|---|---|
| Dimethyl Fumarate (DMF) | 624-49-7 | 0.1 | mg/kg | 0.1 | ND |
| **Conclusion** | | | | | **Pass** |

**Entry 72 of Regulation (EU) 2018/1513 amending Annex XVII of REACH Regulation (EC) No 1907/2006- Carcinogenic, mutagenic and reprotoxic (CMR) substances - Free Formaldehyde**

**Test Method:** With reference to ISO 17226-1:2021, analysis was performed by HPLC-DAD.

| Test Item(s) | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|
| Formaldehyde | 75 | mg/kg | 5.0 | 12 | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**European Regulation POPs (EU) 2019/1021 Annex I– Alkanes $C_{10}$-$C_{13}$, chloro (short chain-chlorinated paraffins) (SCCPs)**

**Test Method:** With reference to ISO 18219-1:2021, analysis was performed by GC-NCI-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| Alkanes,$C_{10}$-$C_{13}$, chloro (short chain-chlorinated paraffins) (SCCPs) | 85535-84-8 and others | 1500 | mg/kg | 50 | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** |

**European Regulation POPs (EU) 2021/277 amending Regulation (EU) 2019/1021 Annex I– Pentachlorophenol (PCP) and its salts and esters**

**Test Method:** With reference to ISO 17070:2015, analysis was performed by GC-MS or GC-ECD.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| Pentachlorophenol (PCP) and its salts and esters | 87-86-5 and others | 5 | mg/kg | 0.5 | ND | ND |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| **Conclusion** | | | | | **Pass** | **Pass** |

**Chlorinated Paraffins**

**Test Method:** With reference to ISO 18219-1:2021, analysis was performed by GC-NCI-MS.

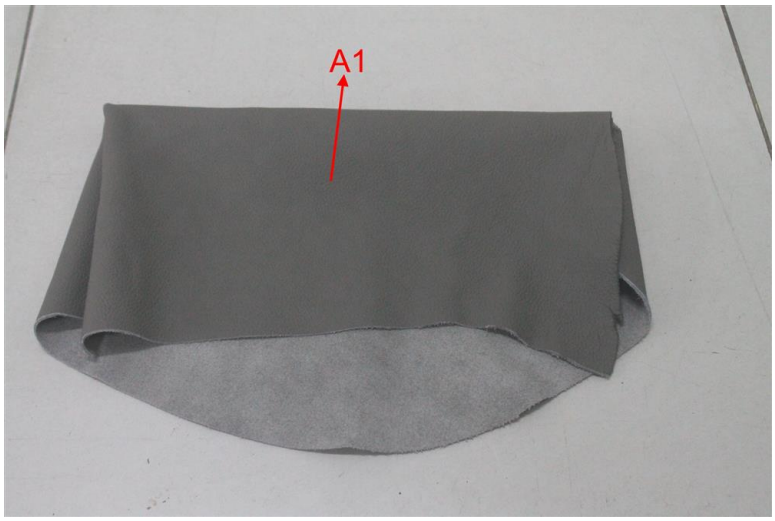
| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 | A3+A4 |
|---|---|---|---|---|---|---|
| Short Chain Chlorinated Paraffin(C10-C13)(SCCP) | 85535-84-8 | 0.1 | % | 0.0050 | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** |

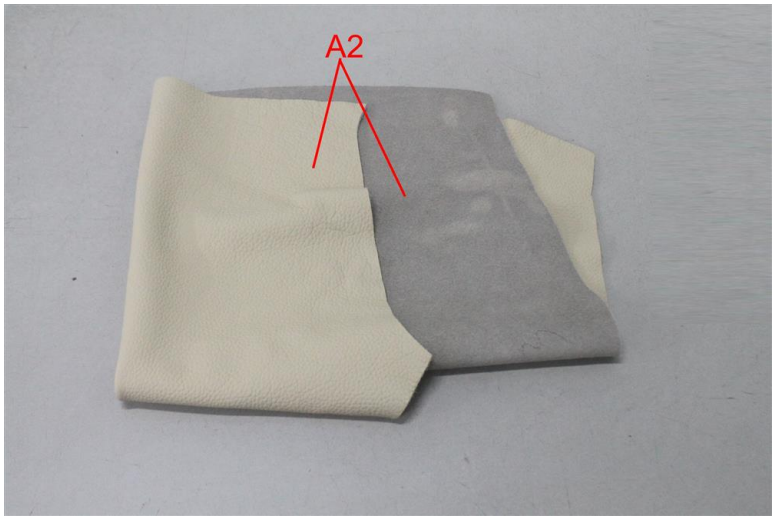
**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

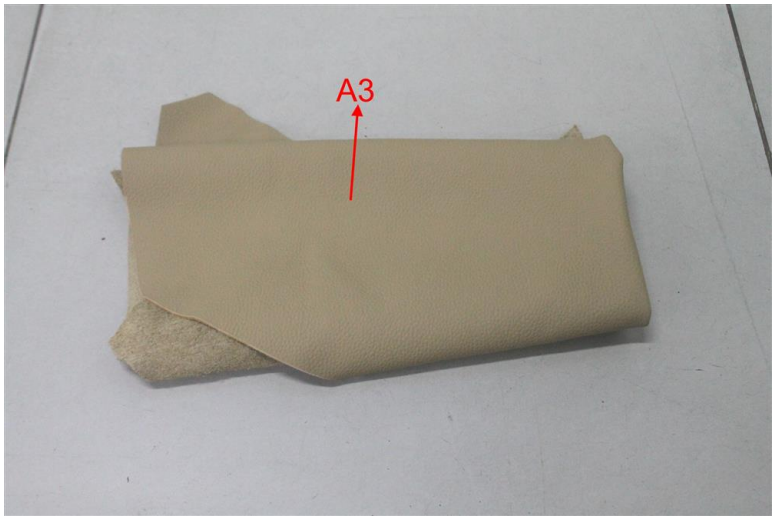
Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

Remark: This test report is issued based on the modification of the original No. GZHL250803206901FT test report issued on Aug 08, 2025. And the original report is still valid. According to applicant's requirements, following changes are included:
a. Change of applicant's name.
b. Change of applicant's address.

**Sample Photo:**

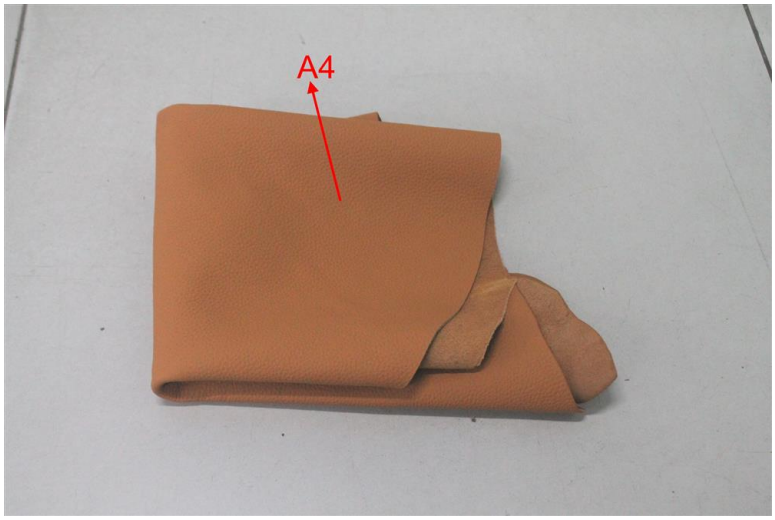







SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com




***End of Report***



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

FOSHAN X&Y LEATHER CO.,LTD.
NO.102,LONGJIANG SECTION,NATIONAL HIGHWAY 325,LONGJIANG COMMUNITY,LONGJIANG TOWN, SHUNDE DISTRICT,FOSHAN CITY

| | |
|---|---|
| Sample Description | : DINING CHAIR |
| Client Reference Information | : BUYER:BDSK HANDELS GMBH & CO.,KG |
| Item No. | : PABLO |
| Style No. | : 12610024-01/02/03/04 |
| SKU No. | : NIO6,NIO2 |
| Manufacturer | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |
| Supplier | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |
| Country of Origin | : CHINA |
| Country of Destination | : GERMANY |

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

**********

| | |
|---|---|
| SGS Ref No. | : CAN24-0084517 |
| Sample Receiving Date | : Apr 25, 2024 |
| Test Performing Date | : Apr 26, 2024 to May 06, 2024 |
| Test Performed | : Selected test(s) as requested by applicant |
| Test Result(s) | : For further details, please refer to the following page(s) |

| | Test Requirement | Conclusion |
|---|---|---|
| 1 | Azo Dyes | Pass |
| 2 | Nonylphenol(NP) & Nonylphenol Ethoxylates (NPEOs) | Pass |
| 3 | Pentachlorophenol (PCP) | Pass |
| 4 | Formaldehyde | Pass |
| 5 | Hexabromocyclododecane (HBCDD) | Pass |
| 6 | Short Chain Chlorinate Paraffin(SCCP)(C10-C13) | Pass |
| 7 | Dimethyl fumarate (DMFu) | Pass |
| 8 | Hexavalent Chromium(CrVI) | Pass |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Scan to see the report

GZHL2404016191HI
Verification:
check.sgsonline.com.cn

Yan Lau
Authorized Signatory



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**Test Result(s):**

Test Part Description：

| SN ID | Sample No. | SGS Sample ID | Description |
|---|---|---|---|
| SN1 | A1 | CAN24-0084517-0001.C001 | Black leather |
| SN2 | A2 | CAN24-0084517-0001.C002 | Dark khaki leather |
| SN3 | A1+A2 | CAN24-0084517-0002 | Black leather + Dark khaki leather |

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated
(5) Composite test has been performed and the result(s) is/are calculated using the minimum sample weight.

**Azo Dyes**

Test Method: Leather: With reference to ISO 17234-1:2020, analysis was performed by GC-MS/HPLC-DAD. Determination of 4-aminoazobenzene (CAS No.:60-09-3): With reference to ISO 17234-2:2011, analysis was performed by GC-MS/HPLC-DAD.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 |
|---|---|---|---|---|---|
| 4-Aminobiphenyl | 92-67-1 | 1000 | mg/kg | 5 | ND |
| Benzidine | 92-87-5 | 1000 | mg/kg | 5 | ND |
| 4-Chlor-o-toluidine | 95-69-2 | 1000 | mg/kg | 5 | ND |
| 2-Naphthylamine | 91-59-8 | 1000 | mg/kg | 5 | ND |
| o-Aminoazotoluene | 97-56-3 | 1000 | mg/kg | 5 | ND |
| 5-Nitro-o-Toluidine/2-Amino-4-Nitrotoluene | 99-55-8 | 1000 | mg/kg | 5 | ND |
| 4-Chloroaniline | 106-47-8 | 1000 | mg/kg | 5 | ND |
| 4-Methoxy-m-Phenylenediamine/2,4-Diaminoanisole | 615-05-4 | 1000 | mg/kg | 5 | ND |
| 4,4'-Diaminodiphenylmethane, MDA | 101-77-9 | 1000 | mg/kg | 5 | ND |
| 3,3'-Dichlorobenzidine | 91-94-1 | 1000 | mg/kg | 5 | ND |
| 3,3'-Dimethoxybenzidine | 119-90-4 | 1000 | mg/kg | 5 | ND |
| 3,3'-Dimethybenzidine | 119-93-7 | 1000 | mg/kg | 5 | ND |
| 4,4'-methylenedi-o-Toluidine/3,3'-Dimethyl-4,4'-Diaminodiphenylmethane | 838-88-0 | 1000 | mg/kg | 5 | ND |
| p-Cresidine | 120-71-8 | 1000 | mg/kg | 5 | ND |
| 4,4'-Methylene-bis-(2-chloroaniline) | 101-14-4 | 1000 | mg/kg | 5 | ND |
| 4,4'-Oxydianiline | 101-80-4 | 1000 | mg/kg | 5 | ND |
| 4,4'-Thiodianiline | 139-65-1 | 1000 | mg/kg | 5 | ND |
| o-Toluidine | 95-53-4 | 1000 | mg/kg | 5 | ND |
| 4-Methyl-m-Phenylenediamine/2,4-Toluylendiamine, TDA | 95-80-7 | 1000 | mg/kg | 5 | ND |
| 2,4,5-Trimethylaniline | 137-17-7 | 1000 | mg/kg | 5 | ND |
| 4-Aminoazobenzene | 60-09-3 | 1000 | mg/kg | 5 | ND |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 |
|---|---|---|---|---|---|
| O-Anisidine | 90-04-0 | 1000 | mg/kg | 5 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) 4-Aminodiphenyl (CAS No. 92-67-1), 2-Naphthylamine (CAS No. 91-59-8) and 2,4-Diaminoanisole (CAS No. 615-05-4) can be indirectly generated from some colorants which do not contain these amines azo bound. The use of banned azo colorants cannot be reliably ascertained without additional information.
(2) In case PU is used, e.g. PU Foams or coatings, it cannot be ruled out that MDA (CAS No. 101-77-9) and TDA (CAS No. 95-80-7) can be released from PU material, not from banned azo colorant. Similarly, for pigment prints, MDA will be released from a chemical fixing agent.
(3) The EN ISO 17234-1:2015 will enable further cleavage of 4-aminoazobenzene (CAS No. 60-09-3) to non-forbidden amines: aniline and p-phenylenediamine. If aniline and/or p-phenylenediamine is not found, 4-aminoazobenzene is considered as “n.d.” (i.e. <5.0 mg/kg). Otherwise, the EN ISO 17234-2:2011 will be employed to verify the presence of 4-aminoazobenzene.
(4) The maximum permissible limit is quoted from the client requirement.
(5) Test was conducted on composite of random parts of the item as per client’s request and the test result is the overall result.

**Nonylphenol(NP) & Nonylphenol Ethoxylates (NPEOs)**

Test Method: With reference to ISO 18254-1:2016, analysis was performed by LC-MS.

| Test Item(s) | Limit | Unit(s) | MDL | A1+A2 |
|---|---|---|---|---|
| Nonylphenol Ethoxylates (NPEOs) | 1000 | mg/kg | 10 | 19 |
| Nonylphenol(NP) | 1000 | mg/kg | 3 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Pentachlorophenol (PCP)**

Test Method: With reference to modified § 64 LFGB BVL B82.02.8-2001 with KOH Extraction, analysis was performed by GC-MS or GC-ECD.

| Test Item(s) | Limit | Unit(s) | MDL | A1 | A2 |
|---|---|---|---|---|---|
| Pentachlorophenol (PCP) | 5 | mg/kg | 0.05 | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Formaldehyde**

Test Method: With reference to ISO 14184-1:2011, analysis was performed by UV-Vis.


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | Limit | Unit(s) | MDL | A1+A2 |
|---|---|---|---|---|
| Formaldehyde | 1500 | mg/kg | 16 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Hexabromocyclododecane (HBCDD)**

Test Method: With reference to IEC 62321-9:2021, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1 | A2 |
|---|---|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6 | 1000 | mg/kg | 20 | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Short Chain Chlorinate Paraffin(SCCP)(C10-C13)**

Test Method: With reference to ISO 18219-1:2021, analysis was performed by GC-NCI-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1+A2 |
|---|---|---|---|---|---|
| Short Chain Chlorinated Paraffin(C10-C13)(SCCP) | 85535-84-8 | 1000 | mg/kg | 50 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Dimethyl fumarate (DMFu)**

Test Method: Solvent extraction, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A1 | A2 |
|---|---|---|---|---|---|---|
| Dimethyl Fumarate (DMFu) | 624-49-7 | 0.1 | mg/kg | 0.1 | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Hexavalent Chromium(CrVI)**


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Method: With reference to DIN EN ISO 17075-1:2017, analysis was performed by UV-Vis.

Ageing Condition: 80ºC for 24 hours < 20% relative humidity

| Test Item(s) | Limit | Unit(s) | MDL | A1 | A2 |
|---|---|---|---|---|---|
| Hexavalent Chromium(CrVI) | 3 | mg/kg | 3 | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**Notes:**
(1)The maximum permissible limit is quoted from the client requirement.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**Sample Photo:**



*** End of Report ***



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

fabb sp. z o.o.
Ul. Komorowicka 39-41
43-300 Bielsko-Biala
Poland

TESTEX AG, Swiss Textile Testing Institute
Gotthardstrasse 61
8002 Zurich
Switzerland

# Certificate

## OEKO-TEX® STANDARD 100

## fabb sp. z o.o.

is granted the OEKO-TEX® STANDARD 100 certification
and the right to use the trademark.

**SCOPE**

Woven fabrics made of 100% polypropylene, dope-dyed during water-free process (using master batches), with acrylate coating; Woven or knitted fabrics (including artificial fur, plush, fleece, brushed, suede, velvet, cord pile, chenille, sherpa) made of 100% polyester, polyester/cationic dyeable polyester, polyester/polyamide (including fancy yarn), polyester/linen, polyamide/PU, piece-dyed, yarn-dyed (using disperse and cationic dyestuffs), dope-dyed during water-free process (using master batches) or glue embossed/printed (using pigments or inks) and finished; partly laminated with white or black PES non-woven backing, or black PES woven and knitted backing, or grey PES knitted brushed backing, or PU fabric; with or without acrylate coating or PU reflective coating (produced using components partly pre-certified according to OEKO-TEX® STANDARD 100 and ECO PASSPORT)

**PRODUCT CLASS**

II (products with direct contact to skin) - Annex 6

STANDARD 100 SH015 129432 TESTEX

**This certificate SH015 129432 is valid until 31.10.2026.**

**SUPPORTING DOCUMENTS**

- ✓ Test report : SH015 272176.1
- ✓ Declaration of conformity in accordance with EN ISO 17050-1 as required by OEKO-TEX®
- ✓ OEKO-TEX® Terms of Use (ToU)

Matz Bachmann
Managing Director

Janine Kuchelmeister
Ecology Team Leader

Further compliance information (REACH, SVHC, POP, GB18401 etc.) can be found on oeko-tex.com/en/faq.

The certificate is based on the test methods and requirements of the OEKO-TEX® STANDARD 100 that were in force at the time of evaluation.

Zurich, 2025-11-13

fabb sp. z o.o.
Poland

TESTEX AG, Swiss Textile Testing Institute
Gotthardstrasse 61
8002 Zurich
Switzerland

# Certificate

## OEKO-TEX® STANDARD 100

## fabb sp. z o.o.

获得 OEKO-TEX® STANDARD 100 认证
及商标使用许可权

认证范围
100%聚丙烯梭织面料，使用色母粒无水纺前着色，含丙烯酸涂层；
100%涤纶、涤纶/阳离子改性涤纶、涤纶/锦纶（含花式纱）、涤纶/亚麻、锦纶/PU 的针织或梭织面料（含人造毛、长毛绒、起绒布、磨毛布、鹿皮绒、天鹅绒、绳条绒、雪尼尔绒、舒棉绒），经匹染、色织（使用分散染料和阳离子染料）、无水纺前着色（使用色母粒）或烫金胶/涂料印花（使用色浆或油墨）及后整理；部分复合白色或黑色涤纶无纺底布、或黑色涤纶梭织和针织底布、或灰色涤纶针织起绒底布、或 PU 面料；部分含丙烯酸涂层或 PU 反光涂层（部分使用有 OEKO-TEX® STANDARD 100 和 ECO PASSPORT 证书的原材料生产）

产品级别
II (直接接触皮肤类产品) - 附录 6

STANDARD 100 SH015 129432 TESTEX

证书 **SH015 129432** 有效期至 **31.10.2026.**

支持文件
- ✓ 测试报告 : SH015 272176.1
- ✓ 符合 EN ISO 17050-1 标准的 OEKO-TEX®符合性声明
- ✓ OEKO-TEX® 使用条款 ToU

Matz Bachmann
Managing Director

Janine Kuchelmeister
Ecology Team Leader

更多法规符合性信息(REACH, SVHC, POP, GB18401 等)可在 oeko-tex.com/en/faq 查看。

认证基于 OEKO-TEX® STANDARD 100 评估时生效的测试方法及要求。

Zurich, 2025-11-13

HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD
HUANGHOU VILLAGE,ZHENGLONG TOWN, HUIYANG DISTRICT, HUIZHOU CITY,GUANGDONG PROVINCE

| | |
|---|---|
| Sample Descriptions | : BARSTOOL |
| Style No.(s) | : 12610024-07/08/09/10 |
| Item No.(s) | : PABLO |
| SKU No.(s) | : TXD2410，TXD2411 |
| Country Of Origin | : CHINA |
| Country Of Destination | : GERMANY |
| Buyer | : BDSK HANDELS GMBH & CO. KG |
| Supplier | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |
| Manufacturer | : HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LTD |

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

**********

| | |
|---|---|
| Sample Receiving Date | : Nov 11, 2024 |
| Test Performing Date | : Nov 11, 2024 to Nov 21, 2024 |
| Test Performed | : Selected test(s) as requested by applicant |
| Test Result(s) | : For further details, please refer to the following page(s) |

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Arthur Mak
Authorized Signatory

Scan to see the report
GZHL241104876201FT
Verification:
check.sgsonline.com.cn



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

I. Chemical Test

| | Test Requirement | Conclusion |
|---|---|---|
| 1 | German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Formaldehyde emissions from coated and uncoated wood based on Annex 1 of the Chemical Prohibition Ordinance (ChemVerbotsV), Federal Gazette, November 26, 2018 - Formaldehyde Emissions | Pass |
| 2 | Pentachlorophenol (PCP) | Pass |
| 3 | Bisphenol A(BPA) | Pass |
| 4 | AZO Dyes | Pass |
| 5 | Hexabromocyclododecane (HBCDD) | Pass |
| 6 | Polycyclic Aromatic Hydrocarbons(PAHs) | Pass |
| 7 | Nickel Release | Pass |
| 8 | Short Chain Chlorinate Paraffin(SCCP)(C10-C13) | Pass |
| 9 | Pesticides | Pass |
| 10 | Lead (Pb) & Cadmium (Cd) | Pass |
| 11 | Dimethyl fumarate (DMFu) | Pass |

**Test Result(s):**

Test Part Description：

| SN ID | Sample No. | SGS Sample ID | Description |
|---|---|---|---|
| SN6 | A6 | CAN24-0008333-0001.C006 | Black powder(used for coating) |
| SN7 | A7 | CAN24-0008333-0001.C007 | Black plastic |
| SN8 | A8 | CAN24-0008333-0001.C008 | White sponge |
| SN9 | A9 | CAN24-0008333-0001.C009 | Brown HWPW-VC |
| SN10 | A10 | CAN24-0008333-0001.C010 | Silvery metal(iron) |
| SN12 | A12 | CAN24-0008333-0001.C012 | Black surfaced metal(round pipe) |

Remarks:

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL = Method Detection Limit
(3) ND = Not Detected (< MDL)
(4) "-" = Not Regulated


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Formaldehyde emissions from coated and uncoated wood based on Annex 1 of the Chemical Prohibition Ordinance (ChemVerbotsV), Federal Gazette, November 26, 2018 - Formaldehyde Emissions**

Test Method: With reference to DIN EN 16516:2018, analysis was performed by HPLC-DAD.

| Test Item(s) | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|
| Chamber Volume | - | $m^3$ | - | 0.05 |
| Sample loading | - | $m^2/m^3$ | - | 1.8 |
| Testing Temperature | - | °C | - | 23.8 |
| Testing Humidity | - | % | - | 50.7 |
| Air Exchange Rate | - | /h | - | 0.5 |
| Test Period Time | - | day | - | 7 |
| DNPH Sampling Flow | - | mL/min | - | 300 |
| DNPH Sampling Time | - | min | - | 60 |
| DNPH Sampling Volume | - | L | - | 18 |
| Formaldehyde Emission | 0.1 | ppm | 0.01 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) ppm = parts per million
(2) $mg/m^3$ = milligram per cubic meter
(3) At 23℃ and 1013hPa, 1ppm = 1.24$mg/m^3$, 1$mg/m^3$=0.81ppm.

**Pentachlorophenol (PCP)**

Test Method: With reference to modified § 64 LFGB BVL B82.02.8-2001 with KOH Extraction, analysis was performed by GC-MS or GC-ECD.

| Test Item(s) | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|
| Pentachlorophenol (PCP) | 5 | mg/kg | 0.05 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Bisphenol A(BPA)**


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

Test Method: With reference to AFIRM RSL method by solvent extraction, analysis was performed by LC-DAD/MS / LC-MS/MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 |
|---|---|---|---|---|---|---|
| Bisphenol A(BPA) | 80-05-7 | 1000 | mg/kg | 0.1 | ND | 127.6 |
| **Conclusion** | | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Hexabromocyclododecane (HBCDD)**

Test Method: With reference to IEC 62321-9:2021, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A7 |
|---|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6 | 1000 | mg/kg | 20 | ND |
| **Conclusion** | | | | | **Pass** |

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 134237-50-6 /134237-51-7 /134237-52-8 /25637-99-4 /3194-55-6 | 1000 | mg/kg | 20 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Polycyclic Aromatic Hydrocarbons(PAHs)**

Test Method: With reference to AfPS GS 2019:01 PAK, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 | A10 |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene(BaP) | 50-32-8 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(e)pyrene(BeP) | 192-97-2 | 1 | mg/kg | 0.1 | ND | ND | ND |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A6 | A7 | A10 |
|---|---|---|---|---|---|---|---|
| Benzo(a)anthracene(BaA) | 56-55-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(b)fluoranthene(BbF) | 205-99-2 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(j)fluoranthene(BjF) | 205-82-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(k)fluoranthene(BkF) | 207-08-9 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Chrysene(CHR) | 218-01-9 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Dibenzo(a,h)anthracene(DBA) | 53-70-3 | 1 | mg/kg | 0.1 | ND | ND | ND |
| Benzo(g,h,i)perylene(BPE) | 191-24-2 | - | mg/kg | 0.1 | ND | ND | ND |
| Indeno(1,2,3-c,d)pyrene(IPY) | 193-39-5 | - | mg/kg | 0.1 | ND | ND | ND |
| Phenanthrene(PHE) | 85-01-8 | - | mg/kg | 0.1 | ND | ND | ND |
| Pyrene(PYR) | 129-00-0 | - | mg/kg | 0.1 | ND | ND | ND |
| Anthracene(ANT) | 120-12-7 | - | mg/kg | 0.1 | ND | ND | ND |
| Fluoranthene(FLT) | 206-44-0 | - | mg/kg | 0.1 | ND | ND | ND |
| Naphthalene(NAP) | 91-20-3 | - | mg/kg | 0.1 | ND | ND | ND |
| Acenaphthylene(ANY) | 208-96-8 | - | mg/kg | 0.1 | ND | ND | ND |
| Acenaphthene(ANA) | 83-32-9 | - | mg/kg | 0.1 | ND | ND | ND |
| Fluorene(FLU) | 86-73-7 | - | mg/kg | 0.1 | ND | ND | ND |
| Sum of 18 PAHs | - | 50 | mg/kg | - | ND | ND | ND |
| **Conclusion** | | | | | **Pass** | **Pass** | **Pass** |

**Notes:**

(1) The maximum permissible limit is quoted from the client requirement.

**Nickel Release**

Test Method: With reference to EN 1811:2023, analysis was performed by ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A12-Trial1 | A12-Trial2 | A12-Trial3 |
|---|---|---|---|---|---|---|
| Volume of Test Solution | - | mL | - | 41.63 | 41.63 | 41.63 |
| Sample Area | - | $cm^2$ | - | 41.63 | 41.63 | 41.63 |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test Item(s) | Limit | Unit(s) | MDL | A12-Trial1 | A12-Trial2 | A12-Trial3 |
|---|---|---|---|---|---|---|
| Whether performed by EN 12472:2020 or not | - | - | - | YES | YES | YES |
| Nickel Release | 0.5 | μg/cm²/ week | 0.10 | ND | ND | ND |
| **Conclusion** | | | | **Pass** | | |

**Notes:**
(1) NO: Positive finding by Nickel spot test is observed based on CEN/TR 12471:2022. Simulation of wear and corrosion according to EN 12472:2020 has been not applied prior to the EN 1811:2023.
YES: Negative finding by Nickel spot test is observed based on CEN/TR 12471:2022. Simulation of wear and corrosion according to EN 12472:2020 has been applied prior to the EN 1811:2023.
(2) The maximum permissible limit is quoted from the client requirement.

**Short Chain Chlorinate Paraffin(SCCP)(C10-C13)**

Test Method: With reference to ISO 22818:2021,analysis was performed by GC-NCI-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Short Chain Chlorinated Paraffin(C10-C13)(SCCP) | 85535-84-8 | 1000 | mg/kg | 50 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Pesticides**

Test Method: With reference to SGS in house method, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A9 |
|---|---|---|---|---|---|
| HCH, including lindane | 319-84-6 /319-85-7 /58-89-9 /608-73-1 | 0.05 | mg/kg | 0.05 | ND |
| **Conclusion** | | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

**Lead (Pb) & Cadmium (Cd)**

Test Method: With reference to EN 1122:2001 Method B, analysis was performed by AAS or ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A7 | A8 |
|---|---|---|---|---|---|
| Cadmium(Cd) | 100 | mg/kg | 5 | ND | ND |
| **Conclusion** | | | | **Pass** | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

Test Method: With reference to CPSC-CH-E1001-08.3, analysis was performed by AAS/ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A10 |
|---|---|---|---|---|
| Lead(Pb) | 500 | mg/kg | 20 | ND |
| Cadmium(Cd) | 100 | mg/kg | 5 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

Test Method: With reference to CPSC-CH-E1003-09.1, analysis was performed by AAS/ICP-OES.

| Test Item(s) | Limit | Unit(s) | MDL | A6 |
|---|---|---|---|---|
| Lead(Pb) | 500 | mg/kg | 20 | ND |
| Cadmium(Cd) | 100 | mg/kg | 5 | ND |
| **Conclusion** | | | | **Pass** |

**Notes:**
(1) The maximum permissible limit is quoted from the client requirement.

**Dimethyl fumarate (DMFu)**

Test Method: Solvent extraction, analysis was performed by GC-MS.

| Test Item(s) | CAS No. | Limit | Unit(s) | MDL | A8 |
|---|---|---|---|---|---|
| Dimethyl Fumarate (DMFu) | 624-49-7 | 0.1 | mg/kg | 0.1 | ND |
| **Conclusion** | | | | | **Pass** |

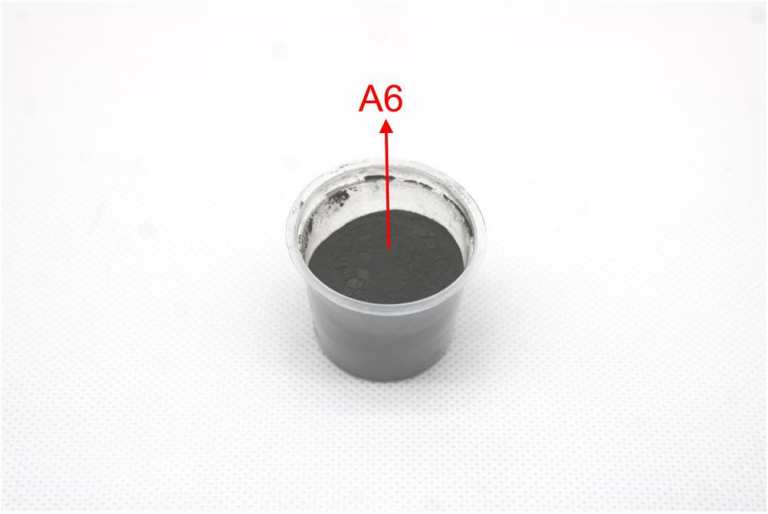
**Notes:**

(1) The maximum permissible limit is quoted from the client requirement.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.

Remark: The content of this test report is extracted from the test report number GZHL2401001673HI.

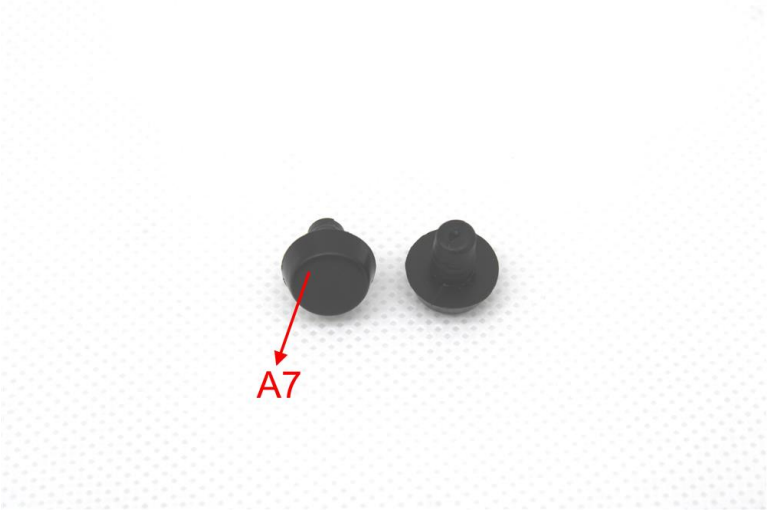
**Sample Photo:**

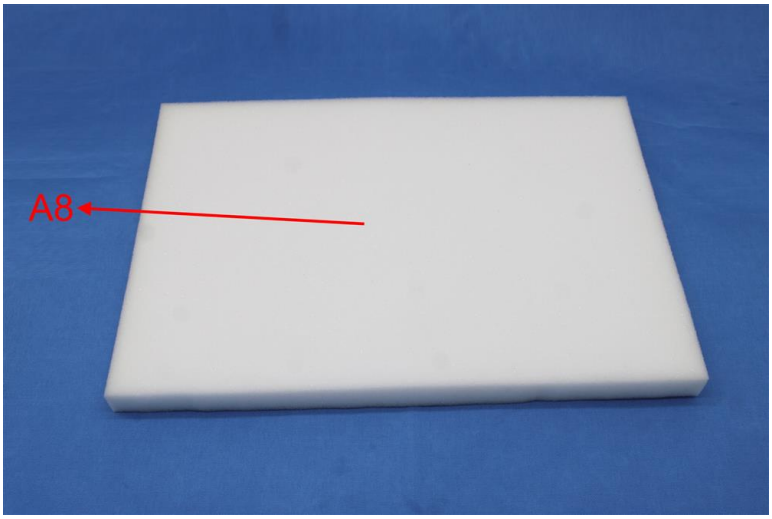


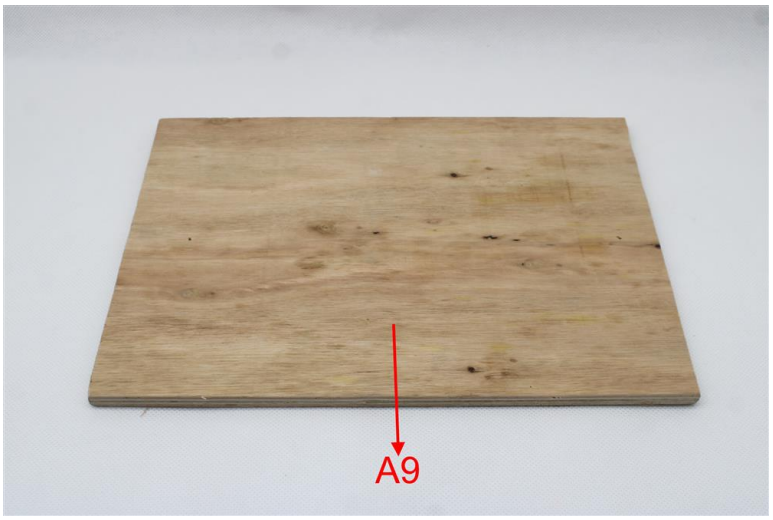


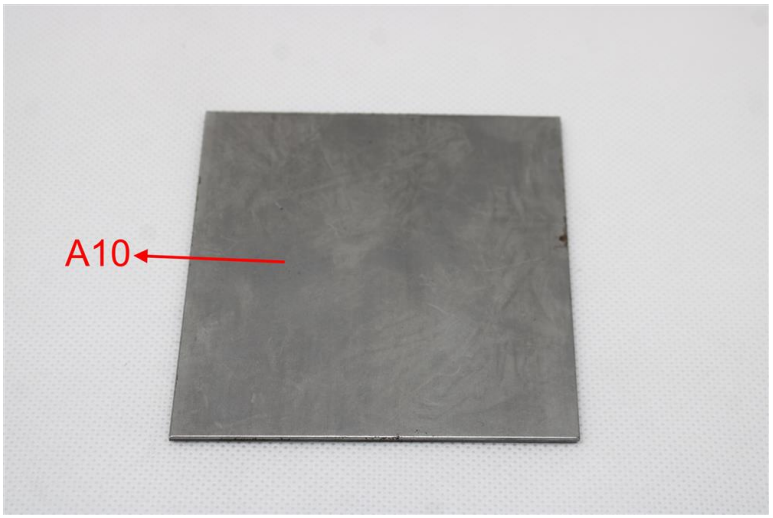

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn

中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com








SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

II. SGS Ref No.: SDHL241102142901FT

The below tests were conducted by SGS-CSTC Standards Technical Services Co.,Ltd. Shunde Branch

## Test Result Summary

| No. | Test(s) Requested | Result(s) | Comments |
|---|---|---|---|
| 1 | EN 12520:2015, excluding information for use | PASS | / |

## TESTS AND RESULTS

**Test Conducted:**
EN 12520:2015 Furniture — Strength, durability and safety -- Requirements for domestic seating, excluding information for use.

**No. of Sample:**
1 piece (Sample #1). For more sample information and pictures, please refer to the following page.

| Test and Requirements | Test Results |
|---|---|
| **5 Constructional requirements** | |
| **5.1 General requirements**<br>- Edges of the seat, back rest and arm rests, which are in contact with the user when sitting are rounded or chamfered. All other edges accessible during use shall be free from burrs and/or sharp edges;<br>- Ends of hollow components are closed or capped.<br>- Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided.<br>- It shall not be possible for any load bearing part of the seating to come loose unintentionally.<br>- All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use. | PASS |
| **5.2 Shear and squeeze points** | |
| **5.2.1 Shear and squeeze points when setting up and folding**<br>Unless 5.2.2 or 5.2.3 are applicable, shear and squeeze points, that are created only during setting up and folding, including tipping seat, are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain. The edges of parts moving relative to each other and creating shear and squeeze points shall be as specified in 5.1. | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **5.2.2 Shear and squeeze points under the influence of powered mechanisms**<br>With the exception of tipping seats there shall be no shear and squeeze points created by parts of the seating under powered mechanisms, e.g. springs and gas lifts.<br>*NOTE Electrically operated seating is covered by EEC Directives for EMC, Machinery, Low Voltage or Medical Devices.* | PASS |
| **5.2.3 Shear and squeeze points during use**<br>There shall be no shear and squeeze points created by loads applied during normal use. The loads applied during normal use can be found in Table 1. Shear and squeeze points are not acceptable if a hazard is 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.<br>*NOTE This hazard is best prevented by the use of automatic locking mechanisms.* | PASS |
| **5.3 Stability**<br>The seating shall fulfil the relevant requirements of EN 1022: 2023. | |
| **EN 1022: 2023, 7 Test methods for assessing stability of all seating except loungers**<br>The stability tests defined in Clause 7 are not applicable to seating which has both the height of the seat loading point < 200 mm and a mass < 5 kg.<br>When tested according to 7.3 and 7.4, the seating shall not overturn. | |
| **EN 1022: 2023, 7.3.1 Forwards overturning**<br>$F_1$= 600 N<br>$F_2$= 20 N<br>For seating with multiple seats simultaneously apply the forces at the two positions most likely to cause overturning. | PASS |
| **EN 1022: 2023, 7.3.2 Forwards overturning for seating with foot rest**<br>$F_1$= 1100 N (single column seats) or 600 N (all other seating)<br>$F_2$= 20 N | PASS |
| **EN 1022: 2023, 7.3.3 Corner stability test**<br>$F_1$= 300 N<br>For seating with multiple seats apply a force $F_1$= 300 N at the loading point on one outside seating position. | N/A |
| **EN 1022: 2023, 7.3.4 Sideways overturning, all seating without arm rests**<br>$F_1$= 600 N<br>$F_2$= 20 N | N/A |
| **EN 1022: 2023, 7.3.5 Sideways overturning, all other seating**<br>This test is applicable to all seating with arms, or where the top edge of the seat on the transverse plane is more than 50 mm above the height of the seat loading point (A). | |
| **EN 1022: 2023, 7.3.5.2 Seating with arm rests**<br>$F_1$= 250 N<br>$F_2$= 350 N<br>$F_3$= 20 N | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1022: 2023, 7.3.5.3 Seating with raised edges**<br>$F_1$= 250 N<br>$F_2$= 350 N<br>$F_3$= 20 N | N/A |
| **EN 1022: 2023, 7.3.6 Rearwards overturning all seating with back rests**<br>$F_1$= 600 N<br>H ⩾ 720 mm, $F_2$ = 80 N;<br>300 mm ⩽ H < 720 mm, $F_2$ = 0.2857 (1000 – H);<br>H < 300 mm, $F_2$ = 200 N. | PASS |
| **EN 1022: 2023, 7.4 Additional test procedures for seating with reclining back rests** | |
| **EN 1022: 2023, 7.4.2 Tilting seating**<br>Load the seat with the 13 (single column seats) or 11 (all other seating) loading discs so that the discs are firmly settled against the back rest. | N/A |
| **EN 1022: 2023, 7.4.3 Reclining seating with leg rest**<br>Number of discs – back: 8<br>Number of discs – leg rest: 3 | N/A |
| **EN 1022: 2023, 7.4.4 Reclining seating without leg rest**<br>Number of discs – back: 8<br>Number of balancing discs: 3 | N/A |
| **EN 1022: 2023, 7.4.5 Rearwards stability test for rocking chairs**<br>Number of discs: - (single column seats) or 8 (all other seating)<br>Move the chair forwards as far as is practicable or until the back is vertical. Allow the chair to rock rearwards freely under gravity. | N/A |
| **EN 1022: 2023, 8 Loungers**<br>The stability tests defined in Clause 8 are not applicable to loungers which have both a seat height < 200 mm and a mass < 5 kg.<br>When tested according to 8.3, the seating shall not overturn. | |
| **EN 1022: 2023, 8.3.1 Forwards overturning**<br>$F_{B.3}$= 600 N<br>$F_{B.4}$= 20 N | N/A |
| **EN 1022: 2023, 8.3.2 Sideways overturning**<br>$F_{B.1}$=600 N<br>If the arm rest is more than 400 mm in length apply additional vertical force $F_{B.2}$= 250 N in the centre of the arm rest. | N/A |
| **EN 1022: 2023, 8.3.3 Rearwards stability – Upright position**<br>$F_1$= 600 N<br>H ⩾ 720 mm, $F_2$ = 80 N;<br>H < 720 mm, $F_2$ = 0.2857 (1000 – H). | N/A |
| **EN 1022: 2023, 8.3.4 Rearwards stability – Recline position**<br>Number of discs – back: 8<br>Number of discs – leg rest: 3 | N/A |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **5.4 Strength and durability (With reference to the test methods of EN 1728:2012/AC:2013 D/E/F)**<br>Seating shall be tested for strength and durability according to and in the order as below.<br>The strength and durability requirements are fulfilled when during and after testing as below.<br>a) there are no fractures of any member, joint or component;<br>b) there are no loosening of joints intended to be rigid;<br>c) seating fulfils its functions after removal of the test loads;<br>d) seating fulfils the stability requirements. | |
| **EN 1728, 6.4 Seat and Back Static Load Test**<br>Apply the downward force Fv at the seat loading position. With the downward force maintained, apply the back force $F_H$ at back loading position. Remove the back load and then the seat load. Seating with a fixed back position, and seating with reclining mechanisms that cannot be locked into a fixed position, shall be tested for the number of 10 cycles; Seating with reclining mechanisms that can be set or locked in a number of positions shall be tested for 5 cycles in the most upright position, and 5 cycles in the most adverse reclined position. The force Fv and $F_H$ are decided by following rules:<br>When ∅min ⩾70°, Fv=1300N, $F_H$= 450N;<br>When 55°⩽∅min＜70°,<br>Fv = 1300N x sin∅min<br>$F_H$ = (∅/60° - 0.1666) x 1300N x cos∅min<br>When ∅min＜55°,<br>Fv = 975N<br>$F_H$ = 975N x cos∅min<br><br>*Note: Only the vertical seat static force shall be applied to items without a back rest.*<br>*Minimum back force, 410 N.*<br>*Load applied to seats not being tested, 750 N.* | PASS |
| **EN 1728, 6.5 Seat front edge static load**<br>Apply the vertical force of 1300N using the seat loading pad at a point on the seat centre line 100 mm inwards from the front edge of the structure.<br>For multiple seating units, the seat front edge static load test shall be carried out simultaneously on the same seats as used for the seat and back static load test (6.4). During the test, load the seat(s) that are not being tested with the specified seat load for parts not undergoing test, applied at the seat loading position. Repeat above operation for 10 cycles.<br>*Note: Load applied to seats not being tested, 750 N.* | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.8 Foot rest static load test**<br>Apply the specified downward force to the seat at the seat loading point.<br>Apply a vertical force of 1000N by means of the local loading pad (D = 100mm) acting 80 mm from front edge of the load bearing structure of the foot rest at those points most likely to cause failure. For round cross section ring shaped footrests, the force shall be applied through the centre of the ring cross section. Repeat above operation for 10 cycles.<br>*Note: This test is only applicable to seating with a seat height greater than 600 mm. Minimum seat force, 750 N.* | PASS |
| **EN 1728, 6.10 Arm rest sideways static load test**<br>For seating with one arm rest, apply an outward force of 300N to the arm rest at the point along the arm rest most likely to cause failure, but not less than 100 mm from the end of the arm rest structure. Apply the force using the local loading pad (D = 100mm).<br>For seating with two arm rests, apply an outward force to each arm rest of the unit simultaneously.<br>For seating with three or more arm rests, carry out the test on one pair of adjacent arm rests. All different arm rest designs shall be tested.<br>Repeat above operation for 10 cycles. | PASS |
| **EN 1728, 6.11 Arm rest downwards static load test**<br>For seating which only has one arm rest, or which has two arm rests where the distance between the centre of the arm rests is more than 1000 mm, apply the vertical force 700N at the points along the arm rest most likely to cause failure, but not less than 100 mm from the end of the arm rest structure.<br>For seating with two arm rests, where the distance between the centre of the arm rests is 1 000 mm or less, apply the vertical force simultaneously to both arm rests.<br>For seating with three or more arm rests, carry out the test on one pair of adjacent arm rests. All different arm rest designs shall be tested. Repeat above operation for 10 cycles.<br>*Note: Loading pad: D = 200 mm or 100mm.* | PASS |



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn

中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.17 Combined seat and back durability test**<br>Apply the downward force Fv at the seat loading position. With the downward force maintained, apply the back force $F_H$ at back loading position. Remove the back load and then the seat load. Seating with a fixed back position, and seating with reclining mechanisms that cannot be locked into a fixed position, shall be tested for the number of 25000 cycles; Seating with reclining mechanisms that can be set or locked in a number of positions shall be tested for 12500 cycles in the most upright position, and 12500 cycles in the most adverse reclined position. The force Fv and $F_H$ are decided by following rules:<br>When ∅min ⩾70°, Fv=1000N, $F_H$= 300N;<br>When 55°⩽∅min＜70°,<br>Fv = 1000N x sin∅min<br>$F_H$ = (∅/60° - 0.1666) x 1000N x cos∅min<br>When ∅min＜55°,<br>Fv = 750N<br>$F_H$ = 750N x cos∅min<br>*Note: The minimum back force is the force that just prevents rearward overturning.*<br>*Only the vertical seat durability force shall be applied to items without a back rest.*<br>*Load applied to seats not being tested, 750 N.* | PASS |
| **EN 1728, 6.18 Seat front edge durability test**<br>Apply the vertical seat durability force Fv = 800N using the smaller seat loading pad alternately on two points each 80 mm from the front edge of the seat structure and as near as possible to either side of the seat but not less than 80 mm from the edges. One cycle is one application of the specified force to each load position. For seating where it is not possible to apply the force at two points, the force shall be applied to a single position on the longitudinal axes at a point 80 mm from the front edge of the seat structure. One cycle is two applications of the specified force.<br>Repeat above operation for 20000 cycles.<br><br>*Note: In derogation of EN 1728:2012 the loading points shall be 80 mm from the relevant edges of the seat.* | PASS |
| **EN 1728, 6.20 Arm rest durability test**<br>The test load of 400 N shall be applied simultaneously on two points for 10000 cycles, at the point most likely to cause failure, but not less than 100 mm from the front or rear edge of the arm rest length and through the centre of the width of the arm rest, but not more than 100 mm from the inner edge of the arm rest.<br>The force shall be applied at an angle of (10 ± 1)° to the vertical, and to both arm rests simultaneously for seating with only one seating position and to one arm rest only for seating with multiple seating positions. | PASS |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **EN 1728, 6.15 Leg forward static load test**<br>For seating with a single seat, apply the seat load Fv = 1000 N at the seat loading position. Apply the horizontal force FH = 400 N (max.) centrally to the rear of the seat, at seat level, in a forward direction, by means of the local loading pad (D=100mm).<br>For seating with multiple seating positions, apply the horizontal force of the most adverse seat position.<br>For seating with only three legs, one foot on the fore and aft centre line of the item of seating and one other foot shall be restrained by stops.<br>Repeat above operation for 10 times. | N/A |
| **EN 1728, 6.16 Leg sideways static load test**<br>Apply the seat load Fv = 1000 N at any position not more than 150mm from the unload edge of the seat. Apply a horizontal force $F_H$ = 300 N (max.) centrally to the unrestrained side of the seat, at seat level, in a direction towards the restrained feet. For seating with only three legs, one foot on the fore and aft centre line of the item of seating and one other foot shall be restrained by stops. Repeat above operation for 10 times. | N/A |
| **EN 1728, 6.24 Seat Impact Test**<br>Allow the seat impactor to fall freely from the height of 180 mm onto the seat loading position. Repeat the test at one other position considered likely to cause failure, but not less than 100 mm from any edge of the seat. For multiple seating units, apply the test to one end seat and an intermediate seating position. Repeat above operation for 10 times. | PASS |
| **EN 1728, 6.28 Backwards Fall Test**<br>Place the unloaded seating on the drop test floor in normal use position.<br>Apply a rearward horizontal load to a point 50 mm below the top of the back rest in the centre of the back rest.<br>Measure the force required to lift the front legs off the floor.<br>If the measured force is less than FH < 30N, push the top of the back rest rearwards until it reaches the equilibrium point. Allow it to fall freely on its back, onto the rubber faced test floor, without initial force or velocity.<br>Repeat the operation for 5 cycles.<br>*Note: This test is only for single seating units where the back will be the first part of the structure to strike the floor and the force used to overturn the chair rearwards is FH < 30 N.* | PASS |
| **EN 1728, 6.25 Back Impact Test**<br>Prevent the chair form movement by stops against the front leg. Allow the impact hammer (8.5 kg) to fall freely from the height H = 120 mm or an angel θ = 28° onto the center of the top outside of the chair back for 10 times. If the item has no back, strike the centre of the seat rear edge. If a stool or bench has no easily determined rear edge, apply the test in the direction most likely to cause failure.<br>*Note: This test is for all seating not tested in accordance with Backward fall test (EN 1728, 6.28).* | N/A |


No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

| Test and Requirements | Test Results |
|---|---|
| **6 Information for use**<br>Information for use shall be available in the language of the country in which it will be delivered to the end user.<br>It shall contain at least the following details:<br>a) assembly instructions, where applicable;<br>b) instructions for the care and maintenance of the seating;<br>c) 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 |

**Remark:**

1. N/A – Not applicable; N/R – Not requested.
2. For the sample information and pictures, please refer to the following page.



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86–20) 82155555 www.sgsgroup.com.cn
中国・广东・广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 sgs.china@sgs.com

## SAMPLE INFORMATION AND PICTURES

**Weight:** 13.9 kg

**Overall Dimensions:** 510 mm L x 540 mm W x (990~1160) mm H

**Other Dimensions:** /

**Sample as Received**

View 1

View 2

View 3

View 4



No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn

中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

View 5

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w$=0) stated in ILAC-G8:09/2019.

***End of Report***



SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

## *Baugleichheitsbescheinigung*
## *Declaration of Identity*

*Wir,* HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED, *bestätigen hiermit, dass die folgenden Produkte baugleich in Bezug auf das Design, die technische Konstruktion und der verwendeten Komponenten mit den Artikeln bei unserem Kunden sind.*

*We,* HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED, *declare that the following products are identical in design, technical construction and used components with the article of our customer.*

*Kunde / Customer*

*Bitte ankreuzen / Please choose*

√*XXXLutz*

√*BDSK*

√*MX Logistika*

√*Sontiges/ other:* _____

| ***Produkt Bezeichnung*** *Product name* | ***Lieferant Artikelnummer*** *Supplier article number* | ***Lutz Gruppe Artikelnummer*** *Lutz Group article number* |
|---|---|---|
| PABLO -EXKLUSIV- | *TXD2591* | *12610024-39* |
| PABLO -EXKLUSIV- | *TXD2591* | *12610024-40* |
| PABLO -EXKLUSIV- | *TXD2591* | *12610024-41* |
| PABLO -EXKLUSIV- | *TXD2591* | *12610024-42* |
| PABLO -EXKLUSIV- | *TXD2591* | *12610024-43* |
| PABLO -EXKLUSIV- | *TXD2590* | *12610024-44* |
| PABLO -EXKLUSIV- | *TXD2590* | *12610024-45* |
| PABLO -EXKLUSIV- | *TXD2590* | *12610024-46* |

*Position of the signatory*
*Supplier Company name and address*

HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED

Adress: Huanghou Village,Zhenlong Town,Huiyang District,Huizhou City,Guangdong Province,China

Vicky

2025/12/4

*Datum / Date*

***Supplier Authorized Signature / Company Stamp***

# Nachweis zur Verwendung von Materialien
## *Declaration of use of materials*

Wir, HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED, bestätigen hiermit, dass die folgenden Produkte oder Materialien bei den aufgeführten Modellen (Modelnummern) verwendet werden.

*We, HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED, declare that the following products or material are used within factory models no.*

| **Produkt / Material**<br>*Product / material* | **Prüfbericht**<br>*Test report* | **Verbaut bei**<br>*Used by* |
|---|---|---|
| *Fabb FABRICS* | *OEKO-TEX (SH015 129432)* | 12610024-44/45/46 |
| *Leather* | *SGS: GZHL2404016191HI*<br>*GZHL250803206001FT* | 12610024-39/40/41/42/43 |
| *Metal,powder,plastic,sponge,plywood* | *SGS: GZHL2404016189HI* | 12610024-<br>39/40/41/42/43/44/45/46 |
| *EN-12520 TEST* | *SGS: GZHL241104876201FT* | 12610024-<br>39/40/41/42/43/44/45/46 |
| *EN-16955:2017* | TUV report no:<br>R505521940001 | 12610024-<br>39/40/41/42/43/44/45/46 |

Company Name und adresse:

HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED

Adress: Huanghou Village,Zhenlong Town,Huiyang District,Huizhou City,Guangdong Province,China

*Manufacturer name and address*

HUIZHOU TIEXIONGDI HARDWARE PRODUCTS CO.,LIMITED

Adress: Huanghou Village,Zhenlong Town,Huiyang District,Huizhou City,Guangdong Province,China

Datum *Date*

Vicky

2025.12.23

*Authorized Signature / Company Stamp*