

证书号第8580157号



# 外观设计专利证书

外观设计名称：恒风塔扇（M60）

设计人：徐显龙

专利号：ZL 2023 3 0534896.1

专利申请日：2023年08月21日

专利权人：深圳市慕向科技有限公司

地址：518116 广东省深圳市龙岗区宝龙街道龙东社区深汕路（  
龙岗段）292号银龙工业区A区A2厂房A302

授权公告日：2024年04月05日 授权公告号：CN 308561404 S

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局长  
申长雨

申长雨



证书号第8580157号

专利权人应当依照专利法及其实施细则规定缴纳年费。本专利的年费应当在每年08月21日前缴纳。未按照规定缴纳年费的，专利权自应当缴纳年费期满之日起终止。

申请日时本专利记载的申请人、设计人信息如下：

申请人：

深圳市慕向科技有限公司

设计人：

徐显龙



# RoHS TEST REPORT

**Report No.:** SAIL240307155R072  
**Product:** Constant Wind Tower Fan  
**Model No.:** M60  
**Applicant:** Shenzhen Muxiang Technology Co., LTD  
**Address:** 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

**Date of Receipt:**

Mar 7, 2024

**Date of Test:**

Mar 7, 2024

**Date of Issue:**

Mar 14, 2024

**Test Result:** Pass

**Testing Engineer** :

*Fan Lian*  
(Fan Lian)

**Authorize Signatory** :

*Mars Zhang*  
(Mars Zhang)



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# TEST REPORT

Applicant : Shenzhen Muxiang Technology Co., LTD  
 Applicant Address : 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

The following sample was submitted by the client as:

Product Name : Constant Wind Tower Fan  
 Mode No. : M60  
 Trade Mark. : /  
 Manufacturer : Shenzhen Muxiang Technology Co., LTD  
 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen  
 Test Requested : EU RoHS Directive 2011/65/EU and its amendment directives 2015/863/EU (RoHS 2.0) on Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, DEHP, BBP, DBP & DIBP content  
 Test Standard : IEC 62321-4-2013+A1-2017 IEC 62321-5-2013  
 IEC 62321-7-2-2017 IEC 62321-6-2015  
 IEC 62321-8-2017  
 Test Results : Pass  
 \*\*\*\*\*

**Test Method (s) :**

Chemical testing methods &amp; Equipments

| Testing Item                    | Testing Method                 | Equipment | Equipment No. | Cal Date | Due Date |
|---------------------------------|--------------------------------|-----------|---------------|----------|----------|
| Lead (Pb)                       | IEC 62321-5-2013<br>(EAX.0)    | ICP-OES   | YQ-174        | 2023/9/4 | 2024/9/3 |
| Cadmium (Cd)                    | IEC 62321-5-2013<br>(EAX.0)    | ICP-OES   | YQ-174        | 2023/9/4 | 2024/9/3 |
| Mercury (Hg)                    | IEC 62321-4-2013<br>+A1:2017   | ICP-OES   | YQ-174        | 2023/9/4 | 2024/9/3 |
| Hexavalent chromium<br>(Cr(VI)) | IEC 62321-7-2-2017<br>(EAX.0)* | UV-VIS    | YQ-177        | 2023/8/6 | 2024/8/5 |
| PBBs                            | IEC 62321-6-2015<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |
| PBDEs                           | IEC 62321-6-2015<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |
| DBP                             | IEC 62321-8-2017<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |
| BBP                             | IEC 62321-8-2017<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |
| DEHP                            | IEC 62321-8-2017<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |
| DIBP                            | IEC 62321-8-2017<br>(EAX.0)    | GC-MS     | YQ-211        | 2023/9/4 | 2024/9/3 |

| Test Item(s):                                     | RESULT |     |     |     |     |     |     |     | MDL |
|---|--------|-----|-----|-----|-----|-----|-----|-----|-----|
|   | 1      | 2   | 3   | 4   | 5   | 6   | 7   | 8   |     |
| Cadmium(Cd)                                       | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Lead(Pb)  | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Mercury(Hg)                                       | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Hexavalent Chromium Cr(VI) by alkaline extraction | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 8   |
| <b>Sum of PBBs</b>                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | —   |
| Monobromo biphenyl                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibromo biphenyl                                  | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Tribromo biphenyl                                 | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Tetrabromo biphenyl                               | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Pentabromo biphenyl                               | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Hexabromo biphenyl                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Heptabromo biphenyl                               | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Octabromo biphenyl                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Nonabromo biphenyl                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Decabromo biphenyl                                | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| <b>Sum of PBDEs</b>                               | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | —   |
| Monobromobiphenyl ether                           | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibromobiphenyl ether                             | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Tribromobiphenyl ether                            | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Tetrabromobiphenyl ether                          | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Pentabromobiphenyl ether                          | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Hexabromobiphenyl ether                           | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Heptabromobiphenyl ether                          | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Octabromobiphenyl ether                           | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Nonabromobiphenyl ether                           | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Decabromobiphenyl ether                           | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibutyl Phthalate(DBP)                            | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 50  |
| Benzyl butyl phthalate (BBP)                      | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 50  |
| Bis-(2-ethylhexyl)-Phthalate (DEHP)               | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 50  |
| Diisobutyl Phthalate(DIBP)                        | N.D    | N.D | N.A | N.D | N.D | N.D | N.D | N.D | 50  |

1.Metallic materials 2.Non metallic materials 3.Silicone material 4.resistance  
5.capacitance 6.Solder 7.PCB board 8.USB interface

**Shenzhen Sail Testing Technology Co., Ltd**

Address: Room 416, 4 / F, Miyungu AI Center, Block B, Wuzhou Xintiandi, 6038 Longgang Avenue, Shenzhen, P.R.China  
Tel (86) 0755-23288964; Fax: 0755-23288964; www.sail-test.com, E-Mail: sail@sail-lab.cn

| Test Item(s):                                     | RESULT |     |     |     |     |     |     |     | MDL |
|---|--------|-----|-----|-----|-----|-----|-----|-----|-----|
|   | 9      | 10  | 11  | 12  | 13  | 14  | 15  | 16  |     |
| Cadmium(Cd)                                       | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Lead(Pb)  | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Mercury(Hg)                                       | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 2   |
| Hexavalent Chromium Cr(VI) by alkaline extraction | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 8   |
| <b>Sum of PBBs</b>                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | —   |
| Monobromo biphenyl                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibromo biphenyl                                  | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Tribromo biphenyl                                 | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Tetrabromo biphenyl                               | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Pentabromo biphenyl                               | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Hexabromo biphenyl                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Heptabromo biphenyl                               | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Octabromo biphenyl                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Nonabromo biphenyl                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Decabromo biphenyl                                | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| <b>Sum of PBDEs</b>                               | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | —   |
| Monobromobiphenyl ether                           | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibromobiphenyl ether                             | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Tribromobiphenyl ether                            | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Tetrabromobiphenyl ether                          | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Pentabromobiphenyl ether                          | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Hexabromobiphenyl ether                           | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Heptabromobiphenyl ether                          | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Octabromobiphenyl ether                           | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Nonabromobiphenyl ether                           | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Decabromobiphenyl ether                           | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 5   |
| Dibutyl Phthalate(DBP)                            | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 50  |
| Benzyl butyl phthalate (BBP)                      | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 50  |
| Bis-(2-ethylhexyl)-Phthalate (DEHP)               | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 50  |
| Diisobutyl Phthalate(DIBP)                        | N.D    | N.D | N.D | N.D | N.D | N.D | N.D | N.D | 50  |

9.motor 10.PCB board screws 11.Screw 12.White connection terminal 13.Aluminum sheet  
14.Red connecting wire 15.Black connecting wire 16.Gray plastic case

**Shenzhen Sail Testing Technology Co., Ltd**

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Tel (86) 0755-23288964; Fax: 0755-23288964; www.sail-test.com, E-Mail: sail@sail-lab.cn

| Test Item(s):                                     | RESULT |     |     |     |  | MDL |
|---|--------|-----|-----|-----|--|-----|
|   | 17     | 18  | 19  | 20  |  |     |
| Cadmium(Cd)                                       | N.D    | N.D | N.D | N.D |  | 2   |
| Lead(Pb)  | N.D    | N.D | N.D | N.D |  | 2   |
| Mercury(Hg)                                       | N.D    | N.D | N.D | N.D |  | 2   |
| Hexavalent Chromium Cr(VI) by alkaline extraction | N.D    | N.D | N.D | N.D |  | 8   |
| <b>Sum of PBBs</b>                                | N.D    | N.D | N.D | N.D |  | —   |
| Monobromo biphenyl                                | N.D    | N.D | N.D | N.D |  | 5   |
| Dibromo biphenyl                                  | N.D    | N.D | N.D | N.D |  | 5   |
| Tribromo biphenyl                                 | N.D    | N.D | N.D | N.D |  | 5   |
| Tetrabromo biphenyl                               | N.D    | N.D | N.D | N.D |  | 5   |
| Pentabromo biphenyl                               | N.D    | N.D | N.D | N.D |  | 5   |
| Hexabromo biphenyl                                | N.D    | N.D | N.D | N.D |  | 5   |
| Heptabromo biphenyl                               | N.D    | N.D | N.D | N.D |  | 5   |
| Octabromo biphenyl                                | N.D    | N.D | N.D | N.D |  | 5   |
| Nonabromo biphenyl                                | N.D    | N.D | N.D | N.D |  | 5   |
| Decabromo biphenyl                                | N.D    | N.D | N.D | N.D |  | 5   |
| <b>Sum of PBDEs</b>                               | N.D    | N.D | N.D | N.D |  | —   |
| Monobromobiphenyl ether                           | N.D    | N.D | N.D | N.D |  | 5   |
| Dibromobiphenyl ether                             | N.D    | N.D | N.D | N.D |  | 5   |
| Tribromobiphenyl ether                            | N.D    | N.D | N.D | N.D |  | 5   |
| Tetrabromobiphenyl ether                          | N.D    | N.D | N.D | N.D |  | 5   |
| Pentabromobiphenyl ether                          | N.D    | N.D | N.D | N.D |  | 5   |
| Hexabromobiphenyl ether                           | N.D    | N.D | N.D | N.D |  | 5   |
| Heptabromobiphenyl ether                          | N.D    | N.D | N.D | N.D |  | 5   |
| Octabromobiphenyl ether                           | N.D    | N.D | N.D | N.D |  | 5   |
| Nonabromobiphenyl ether                           | N.D    | N.D | N.D | N.D |  | 5   |
| Decabromobiphenyl ether                           | N.D    | N.D | N.D | N.D |  | 5   |
| Dibutyl Phthalate(DBP)                            | N.D    | N.D | N.D | N.D |  | 50  |
| Benzyl butyl phthalate (BBP)                      | N.D    | N.D | N.D | N.D |  | 50  |
| Bis-(2-ethylhexyl)-Phthalate (DEHP)               | N.D    | N.D | N.D | N.D |  | 50  |
| Diisobutyl Phthalate(DIBP)                        | N.D    | N.D | N.D | N.D |  | 50  |

17.Plastic cover 18.pilot lamp 19.Fan blade 20.Plastic Parts

## Note:

1. mg/kg=milligram per kilogram
2. ND=Not Detected(<MDL)
3. MDL=Method Detection Limit
4. NA=Not Applicable
5. "—" =Not regulated

**RoHS Requirement(mg/kg) :**

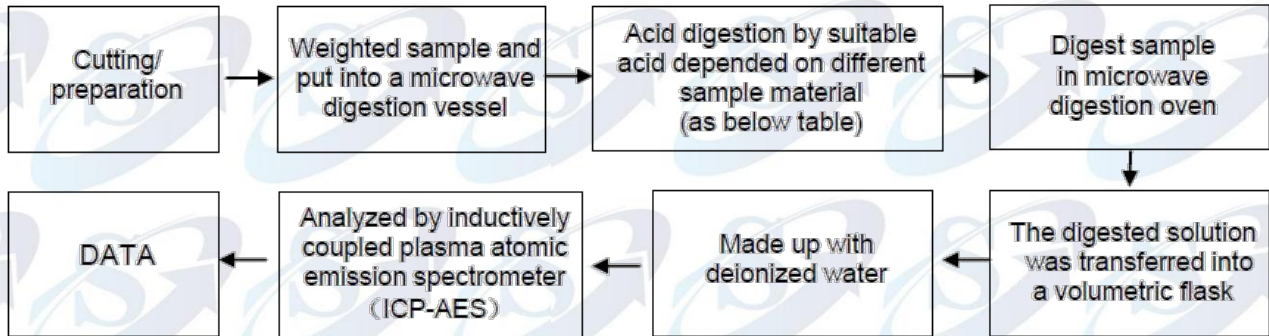
| Restricted substances | Cd  | Pb   | Hg   | Cr(VI) | PBBs | PBDEs | BBP  | DBP  | DEHP | DIBP |
|-----------------------|-----|------|------|--------|------|-------|------|------|------|------|
| RoHS limit            | 100 | 1000 | 1000 | 1000   | 1000 | 1000  | 1000 | 1000 | 1000 | 1000 |

## Appendix

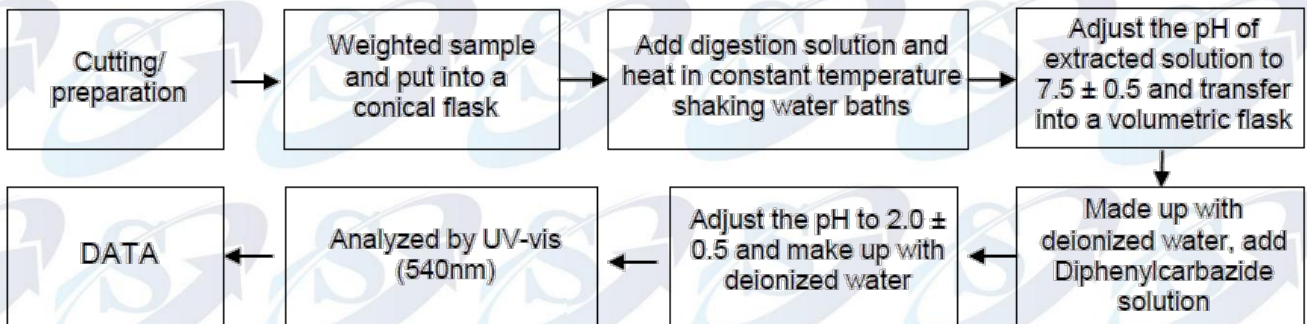
### Test Flow chart

#### 1. Test Flowchart for Cd / Pb /Hg content

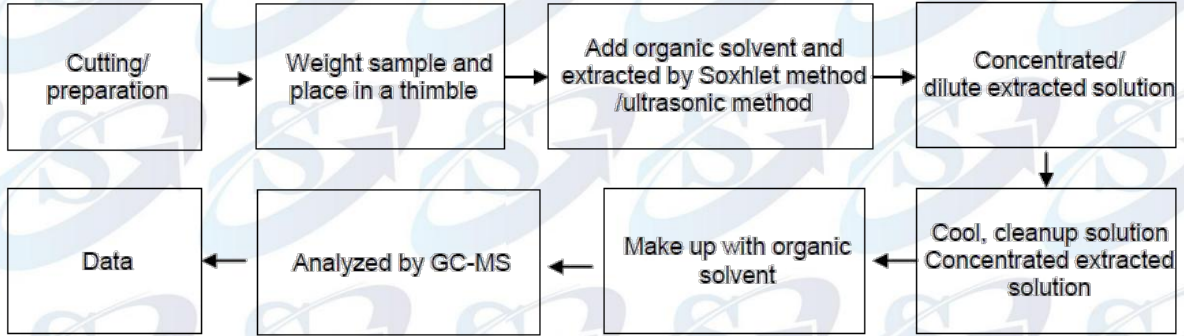
These samples were dissolved totally by pre-conditioning method according to below flow chart.



#### 2. Test Flowchart for Cr<sub>6+</sub> content



## 3. Test Flowchart for PBBs &amp; PBDEs content



## 4. Test Flowchart for DEHP, BBP, DBP &amp; DIBP content

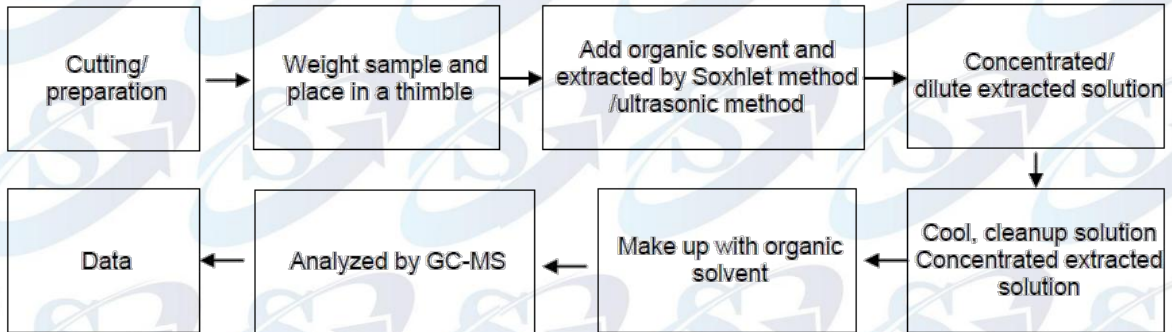
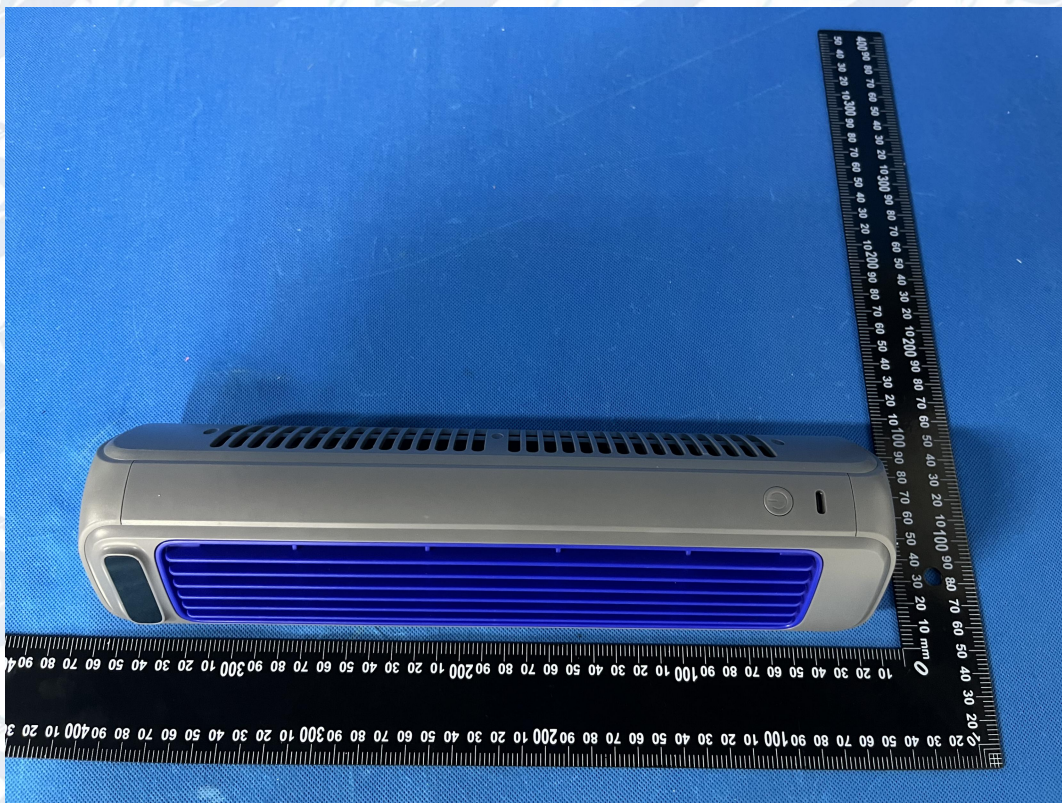


Table:

| Sample material                    | Digestion Acid  |
|------------------------------------|---|
| Steel, copper, aluminum, solder    | Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>                   |
| Glass                              | HNO <sub>3</sub> /HF  |
| Gold, platinum, palladium, ceramic | Aqua regia  |
| Silver                             | HNO <sub>3</sub>  |
| Plastic                            | H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCl |
| Others                             | Any acid to total digestion   |

Sample 1 Photo



Sample 2 Photo



**Sample 3 Photo**



---End of Report---



## Declaration of Conformity



Date of Issue: Mar 14, 2024 Certificate No.: SAIL240307155E070C

**Applicant** : Shenzhen Muxiang Technology Co., LTD

**Address** : 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

**Manufacturer:** : Shenzhen Muxiang Technology Co., LTD

**Address** : 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

**Product** : Constant Wind Tower Fan

**Trademark** : /

**Model No.** : M60

The submitted products have been tested by us with the listed standards and found in compliance with the following European Directives:


### EMC Directive 2014/30/EU

**standard** : EN IEC 55014-1:2021 EN IEC 55014-2: 2021  
EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021

Therefore, Shenzhen SAIL Testing Technology Co.,Ltd hereby acknowledges that the manufacturer may issue a declaration of conformity and apply the CE marking in accordance with European Union Rules.



Attestation by:

  
Mars Zhang, Chief Manager



- 1.This certificate is only valid in connection with the test report number: SAIL240307155E070
- 2.This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above-mentioned product. It does not imply an assessment of the whole production and other relevant directives have to be observed.Other relevant Directives have to be observed.

### Shenzhen SAIL Testing Technology Co.,Ltd

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# Supplier's Declaration of Conformity



## SAIL

Date of Issue: Mar 14, 2024 Certificate No.: SAIL240307155E071C

**Applicant** : Shenzhen Muxiang Technology Co., LTD

**Address** : 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

**Manufacturer:** : Shenzhen Muxiang Technology Co., LTD

**Address** : 2502, Manjing Hua Yingfeng Center Building, Nanlian Community, Longgang District, Shenzhen

**Product** : Constant Wind Tower Fan

**Trademark** : /

**Model No.** : M60

was tested to conform to the applicable FCC Rules and Regulations:

### FCC Rules and Regulations Part 15 Subpart B Class B: 2016

Therefore, Shenzhen SAIL Testing Technology Co.,Ltd hereby acknowledges that the manufacturer may issue a declaration of conformity and apply the FCC king in accordance with America Union Rules.



Attestation by:

Mars Zhang, Chief Manager



- 1.This certificate is only valid in connection with the test report number: SAIL240307155E071
- 2.This certificate of conformity is based on a single evaluation of the submitted sample(s) of the above-mentioned product. It does not imply an assessment of the whole production and other relevant directives have to be observed.Other relevant Directives have to be observed.

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