

# TEST REPORT

**Product** : hearing aid

**Model** : JH-D19-F

**Applicant** : HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.,LTD

**Manufacturer** : HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.,LTD

**Test sort** : Entrustment inspection

**Shenzhen Anbotek Compliance Laboratory Limited**



## Marking

1. The test report is invalid without the official stamp of test center.
2. Nobody is allowed to photocopy or partly photocopy this test report without written permission of test center.
3. The test report is invalid without the signatures of testing engineer, reviewer and approver.
4. The test report is invalid if altered.
5. Objections to the test report must be submitted to test center within 15 days.
6. The test report is valid for the tested samples only.
7. Asfor test verdict, “—”means “no need for judgment” “N/A” means “not applicable”.




# TEST REPORT

**Applicant** : HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.,LTD  
**Address** : FLOOR 6, HUICHENG INDUSTRY BUILDING, NO.9 HUIFENG DONG'ER ROAD, ZHONGKAI HIGH-TECH ZONE, HUIZHOU, GUANGDONG, CHINA  
**Report on the submitted sample(s) said to be:**  
**Sample Name** : hearing aid  
**Model** : JH-D19-F  
**Trademark** : /  
**Description** : /  
**Manufacturer** : HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.,LTD  
**Factory** : HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.,LTD  
**Other information** : /  
**Sample(s) received Date** : 2018.07.10  
**Testing period** : 2018.07.10 - 2018.07.18  
**Report Date** : 2018.07.18

**Test Conclusion :**

Section No.	Test Name	Test Method	Evaluation
1	IPX8	IEC 60529:2013	P

**Prepared by:**Name: Moon Liu  
Title: Test Engineer**Checked by:**Name: Jimmy Zhou  
Title: Lab Manager**Approved by:**Name: Leo Li  
Title: Authorized signatory

# TEST REPORT

## 1. Test standards

IEC 60529:2013

Degrees of protection provided by enclosures(IP Code)

## 2. Conformity verification-Summary of inspection

Clause	Summary of inspection	Test result		
		N/A.	P	F
13	TESTS FOR PROTECTION AGAINST SOLID FOREIGN OBJECTS INDICATED BY THE FIRST CHARACTERISTIC NUMERAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	TESTS FOR PROTECTION AGAINST WATER INDICATED BY THE SECOND CHARACTERISTIC NUMERAL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Test case verdicts:

N/A.: Test case does not apply to the test object

P: Test item does meet the requirement

F: Test item does not meet the requirement

### 2.1 Environmental Conditions :

Environmental Temperature: 15℃~35℃

Relative Humidity: 25%~65%

Pressure: 86kpa~106kpa

### 2.2 Test equipment :

Equipment Name	Equipment No.	Model	Validity Period
Water proof test system	SE-1154	GR-IPX8A	2018.08.24





# TEST REPORT

## 3. Test information and results

IEC 60529:2013				
Clause	Requirement-Test		Result-Remark	Verdict
13	TESTS FOR PROTECTION AGAINST SOLID FOREIGN OBJECTS INDICATED BY THE FIRST CHARACTERISTIC NUMERAL			
13.1	Test means			-
	Test means and the main test conditions are given in Tab.7.			-
	Tab.VII-7 Test means for the tests for protection against solid Foreign objects			-
Table 7	First characteristic numeral	Test means	Test force	-
	0	No test required	-	N/A
	1	Rigid sphere without handle or guard 50mm diameter	50 N ± 10 %	N/A
	2	Rigid sphere without handle or guard 12.5mm diameter	30 N ± 10 %	N/A
	3	Rigid steel rod 2.5mm diameter with edges free from burrs	3 N ± 10 %	N/A
	4	Rigid steel wire 1mm diameter with edges free from burrs	1 N ± 10 %	N/A
	5	Dust chamber Fig.2,with or without underpressure	-	N/A
	6	Dust chamber Fig.2,with underpressure	-	N/A
13.2	Test conditions for first characteristic numerals 1, 2, 3, 4			N/A
	The object probe is pushed against any openings of the enclosure with the force specified in table 7.			N/A
13.3	Acceptance conditions for first characteristic numerals 1, 2, 3, 4			N/A
	The protection is satisfactory if the full diameter of the probe specified in table 7 does not pass through any opening.			N/A

IEC 60529:2013			
Clause	Requirement-Test	Result-Remark	Verdict
13.4	Dust test for first characteristic numerals 5 and 6	First characteristic numeral is 6	N/A
	The test is made using a dust chamber incorporating the basic principles shown in figure 2 whereby the power circulation pump may be replace by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 and the nominal width of a gap between wires 75µm . The amount of talcum powder to be used is 2Kg per cubic metre of the test chamber volume. It shall not have been used for more than 20 tests.		N/A
	Enclosures are of necessity in one of two categories: Category1: Enclosures where the normal working cycle of the equipment causes reductions in air pressure within the enclosure below that of the surrounding air, for example, due to thermal cycling effects. Category 2:Enclosures where no pressure difference relative to surrounding air is present.		-
	Category 1 enclosures: The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump.The suction connection shall be made to a hole specially provided for this test. A volume of air 80 times the volume of the sample enclosure tested without exceeding the extraction rate of 60 volumes per hour. In no event shall the depression exceed 2 kPa(20 mbar) on the manometer shown in figure 2.		N/A
	Category 2 enclosures: The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test.The test shall be continued for a period of 8h.		-

14	TESTS FOR PROTECTION AGAINST WATER INDICATED BY THE SECOND CHARACTERISTIC NUMERAL					
14.1	Test means					-
	The test means and the main test conditions are given in the table 8					-
	Table 8 Test means and main test conditions for the tests for Protection against water					-
	Second Characteristic numeral	Test means	Water flow rate	Duration of test	Test conditions	-
	0	No test required	-	-	-	N/A
	1	Drip box Fig.3 Enclosure on turntable	1 mm/min	10 min	14.2.1	N/A
	2	Drip box Fig.3 Enclosure in 4 fixed positions of 15°tilt	3 mm/min	2.5 min for each position of tilt	14.2.2	N/A
	3	Oscillating tube Fig.a Spray ±60°from vertical, distance max.200mm or Spray nozzle Fig.5 Spray ±60°from vertical	0.07L/min ±5% per hole, multiplied by Number of holes 10L/min ±5%	10min  1 min/m <sup>2</sup> at least 3 min	14.2.3a)  14.2.3b)	N/A
	4	As for numeral 3 Spray ±180° from vertical	As for numeral 3	As for numeral 3	14.2.4	N/A
	5	Water jet hose Nozzle Fig.6 Nozzle 6.3mm diameter,distance 2.5m to 3m	12.5L/min ±5%	1 min/m <sup>2</sup> at least 3 min	14.2.5	N/A





6	Water jet hose Nozzle Fig.6 Nozzle 12.5mm diameter,distance 2.5m to 3m	100L/min ±5%	1 min/m <sup>2</sup> at least 3 min	14.2.6	N/A
7	Immersion tank Water-level on Enclosure:0.15m above top 1m above bottom	-	30min	14.2.7	N/A
8	Immersion tank Water-level:by agreement	-	by agreement	14.2.8	P
9	Fan jet nozzle Figure 7 Test of small enclosure on turntable Figure12 Turntable speed(5± 1)r/min Spray at 0° , 30° , 60° , 90° Or Test of large enclosures as per intended use Spray from all practical directions Distance(175±25)mm	(15±1)L/min	30s per position  1min/m <sup>2</sup> at least 3 min	14.2.9(a)  14.2.9(b)	N/A
14.2.8	Test for second characteristic numeral 8				P
	Depth:1.5m Test Time: 1H				P

**4.Test result:**

NO	Item	Requirements	Result	Verdict
SZAEK1807 10011-S1	IPX8	No water enter the sample inside or the water inside does not affect the electrical properties of the sample.	No water enter the sample inside	P





# TEST REPORT

## 5. Photos



Before test



Test set-up



**Test set-up**



**After test**

**\*\*\*End of report\*\*\***