Report No.: STL2024R1016099C-Y1

RoHS

TEST REPORT

Prepared for :

ShenZhen Mingnuo Bicycle Co.,Ltd

4th floor, No.3, Xinglong Road, Tangxiichong Community, Pingluo Street, Baoan District, Shenzhen City, Guangdong Province

Product:	**Electric Bike**
Trade Name:	**ORLMS**
Model Name:	**V3,MN-6,S9,XDC600,V-07,V-08,MX500, CITY26,S10,V5,E5,E6,S11,finder26, seeker26,TS60**
Date of Test:	**Oct .09-16,2024**
Date of Report:	**Oct .16,2024**
Report Number:	**STL2024R1016099C-Y1**

Prepared By :

Shenzhen STL Testing Technology Co., Ltd.

TEST RESULT CERTIFICATION

Applicant	:	ShenZhen Mingnuo Bicycle Co.,Ltd
Address	:	4th floor, No.3, Xinglong Road, Tangxiichong Community, Pingluo Street, Baoan District, Shenzhen City, Guangdong Province
Manufacturer	:	ShenZhen Mingnuo Bicycle Co.,Ltd
Address	:	4th floor, No.3, Xinglong Road, Tangxiichong Community, Pingluo Street, Baoan District, Shenzhen City, Guangdong Province
Product name	:	Electric Bike
Product model	:	V3,MN-6,S9,XDC600,V-07,V-08,MX500,CITY26,S10,V5,E5,E6,S11, finder26,seeker26,TS60
Trade Name	:	ORLMS

Date of Sample Received : Oct .09,2024

Testing Period : Oct .09-16,2024

Test Requested:

Based on the verification results of the submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) do not exceed the limits as set by RoHS. Directive 2015/863/EU amending Annex II to Directive 2011/65/EU.

Conclusion

PASS

Prepared by: Eris
Project Engineer

Checked By: Lewis
Project Supervisor

Approved by:
Technical Director

** Modified History **

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	2024/10/16	

Test Method:

Heavy Metals and Flame Retardants Content – European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

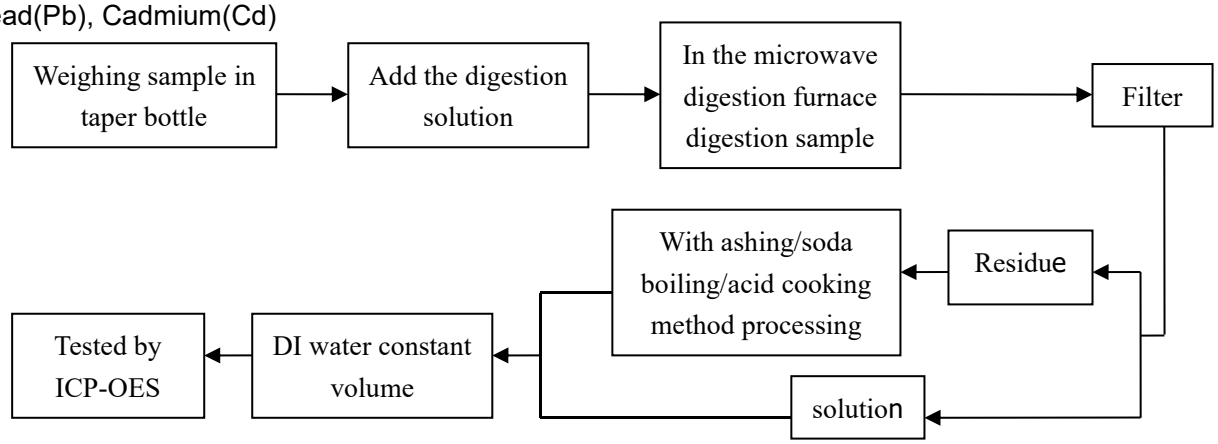
Testing item	Pretreatment method	Measuring instrument	MDL
Lead(Pb)	EN 62321-5:2014 EN 62321-4:2014+A1:2017	ICP-AES	2 mg/kg
Cadmium(Cd)			
Mercury(Hg)			
Chromium(Cr VI)	EN 62321-7-1:2015 EN 62321-7-2:2017 ISO17075-1:2017	UV-Vis	2 mg/kg
PBBs/ PBDEs	IEC 62321-6:2015	GC-MS	5 mg/kg

Phthalates content – European Council Directive 2011/65/EU and Change-Directive 2015/863/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Test Method: Sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer.

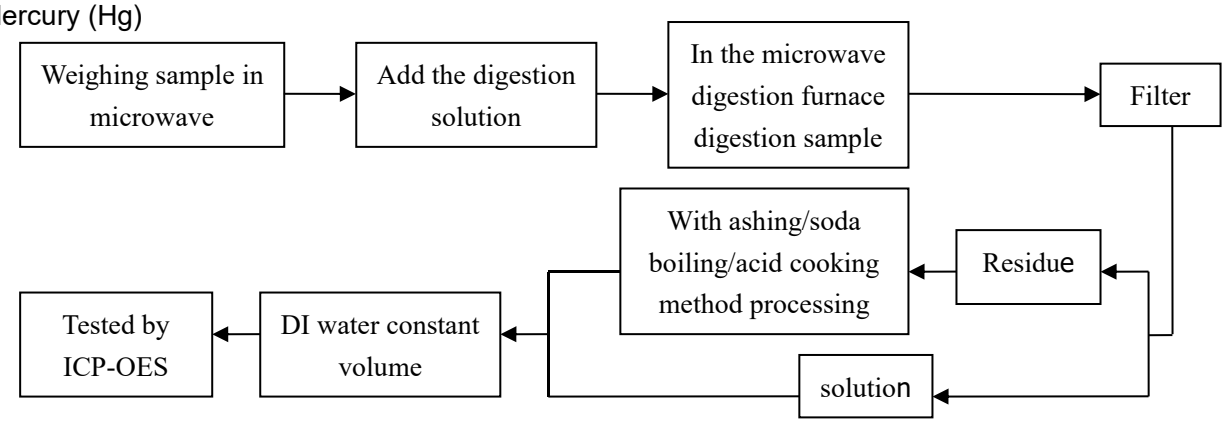
Testing item	Pretreatment method	Measuring instrument	MDL
DEHP/DBP/BBP/ DIBP	IEC 62321-8:2017	GC-MS	0.003 mg/kg

Test Flow:

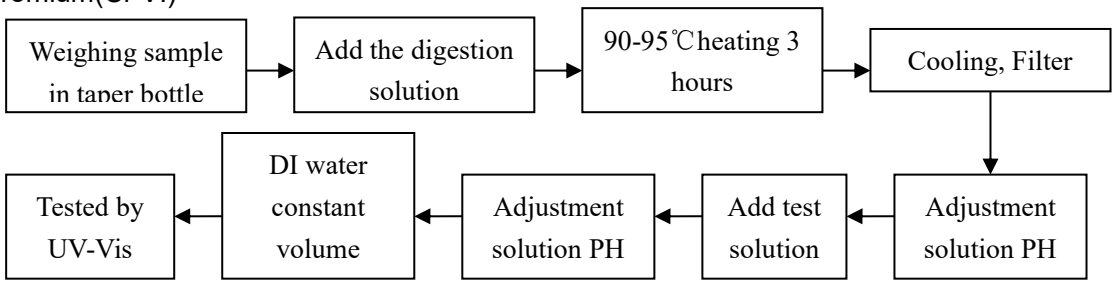
1. Lead(Pb), Cadmium(Cd)



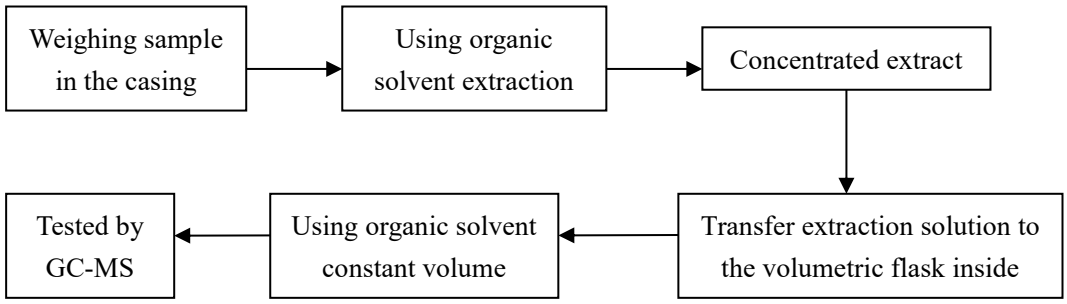
2. Mercury (Hg)



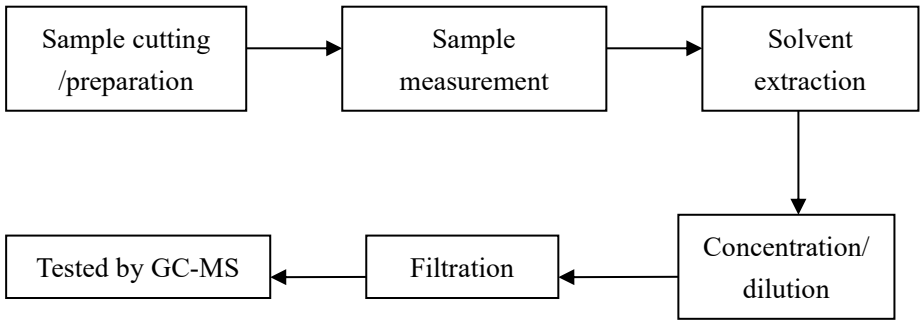
3. Chromium(Cr VI)



4. PBBs/ PBDEs



5. DEHP/ BBP/ DBP/ DIBP



Test Results：

Testing Item	Unit	ROHS Limit	Result					
			1	2	3	4	5	6
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBBs/ PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	/	N.D.	/
Monobromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Dibromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Tribromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Tetrabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Pentabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Hexabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Heptabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Octabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Nonabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Decabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Monobromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Dibromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Tribromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Tetrabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Pentabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Hexabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Heptabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Octabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Nonabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Decabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	/	N.D.	/
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	N.D.	/	N.D.	/
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	/	N.D.	/
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	/	N.D.	/
Di-isobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	N.D.	/	N.D.	/

Sample Description:

1 Black plastic
2 Yellow plastic
3 Blue plastic
4 Silver Buckle
5 PCB
6 battery

Testing Item	Unit	ROHS Limit	Result					
			7	8	9	10	11	12
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBBs/ PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	/	/
Monobromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Dibromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Tribromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Tetrabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Pentabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Hexabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Heptabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Octabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Nonabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Decabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Monobromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Dibromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Tribromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Tetrabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Pentabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Hexabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Heptabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Octabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Nonabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Decabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	/	/
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	/	/
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	/	/
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	/	/
Di-isobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	/	/

Sample Description:

7 Red interior line

8 Black interior line

9 Screen cable

10 IC

11 Welding

12 screw

Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (<MDL)

MDL = Method Detection Limit

/=Not Regulated

---=Not Applicable

FIGURE 1

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 5

FIGURE 6

FIGURE 7

FIGURE 8

End of Report