



Scan code for report

Test Report

Report No. CCTI-2023112217R

Date: Dec. 14, 2023

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Applicant : Shenzhen KuKirin Technology Co., Ltd.
Address : Room 4F4913, Shenzhou Computer Building, Marie Curie Avenue, Vanke City Community, Bantian Street, Longgang District, Shenzhen City

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client

Sample name : Electric scooter

Testing type /model : G4MAX

Additional type /model : N/A

Trademark : N/A

Manufacturer name : Jinhua Feimi Intelligent Technology Co., Ltd.

Address : 14 Mudan South Road, Baiyang Street, Wuyi County, Jinhua City, Zhejiang Province

Sample received date : Nov. 20, 2023

Testing period : Nov. 20, 2023 to Dec. 14, 2023

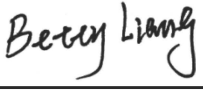
Test requested : As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate (DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP) in the submitted sample in accordance with the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863 with effective from 22 July 2019.

Test Method : Please refer to the following page(s)

Test Result(s) : Please refer to the following page(s)

Conclusion : The test results comply with the limits of RoHS 2.0 Directive (EU) 2015/863 and (EU)2017/2102 amending Annex II to Directive 2011/65/EU.

*****FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)*****

Producer By : 
(Betty Liang / Engineer)

Date: Dec. 14, 2023

Authorized Signer : 
(Corey Mao / Manager)

Date: Dec. 14, 2023



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Test Method:

A. Screening test by XRF spectroscopy

XRF screening limits in mg/kg for regulated elements according to IEC 62321-3-1:2013.

Element	Limit of IEC 62321-3-1:2013. Unit (mg/kg)		MDL	
	Polymers and Metals	Composite Material	Polymers	Other material
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma)$ $\leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma)$ $\leq OL$	10 mg/kg	50 mg/kg
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma)$ $\leq OL$	$LOD \leq (50-3\sigma) < X < (150+3\sigma)$ $\leq OL$	10 mg/kg	50 mg/kg
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma)$ $\leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma)$ $\leq OL$	10 mg/kg	50 mg/kg
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$	10 mg/kg	50 mg/kg
Br	$BL \leq (300-3\sigma) < X$	$BL \leq (250-3\sigma) < X$	10 mg/kg	50 mg/kg

Note:

-BL = Under the XRF screening limit

-OL = Further chemical test will be conducted while result is above the screening limit

-X= The symbol "X" marks the region where further investigation is necessary

-3σ= The reproducibility of analytical instruments

-LOD= Detection limit

B. Chemical Test

Test Item	Test Method	Test Equipment	MDL	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES	2 mg/kg	1000 mg/kg
Hexavalent Chromium Cr (VI) (Metal)	IEC 62321-7-1:2015	UV-VIS	0.1 µg/cm ²	0.13 µg/cm ²
Hexavalent Chromium Cr (VI) (Nonmetal)	IEC 62321-7-2:2017	UV-VIS	8 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS	50mg/kg	1000 mg/kg

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Test Result(s):

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
1	Black rubber handle	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
2	Black metal rod	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
3	display	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
4	metal hook	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
5	Black plastic controlled handbrake	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
6	Silver metal rod	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
7	Black rubber material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
8	Front LED lights	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
9	Rear reflector	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
10	Circular charging port	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
11	Black control wire	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
12	LED lights on both sides	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
13	Front mudguard	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
14	Rear mudguard	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
15	wheel	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
16	Blue rubber	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
17	Black metal plate	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
18	Metal wheel motor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
19	Metal brake pads	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
20	Metal brake controller	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
21	Silver metal screw	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	

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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
22	Password lock	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
23	Rotating switch	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
24	Black metal spring	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
25	Black metal screws	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
26	Black woven rope	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
27	Metal foot brace	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
28	Black plastic	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	

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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
29	Reflective panels on both sides	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
30	Gear controller	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
31	Grey rubber material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
32	Black metal buckle	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	
33	Metal faucet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	/	/	

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Tested Item(s)	Result Unit (mg/kg)					Acceptable Limit Unit (mg/kg)
	1	2	3	4	5	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	/	N.D.	N.D.	/	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	/	N.D.	N.D.	/	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	/	N.D.	N.D.	/	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	/	N.D.	N.D.	/	N.D.	1000

Tested Item(s)	Result Unit (mg/kg)					Acceptable Limit Unit (mg/kg)
	6	7	8	9	10	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	/	N.D.	N.D.	N.D.	/	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	/	N.D.	N.D.	N.D.	/	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	/	N.D.	N.D.	N.D.	/	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	/	N.D.	N.D.	N.D.	/	1000

Tested Item(s)	Result Unit (mg/kg)					Acceptable Limit Unit (mg/kg)
	11	12	13	14	15	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	N.D.	N.D.	N.D.	N.D.	1000

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Tested Item(s)	Result Unit (mg/kg)						Acceptable Limit Unit (mg/kg)
	16	17	18	19	20	21	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	/	/	/	/	/	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	/	/	/	/	/	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	/	/	/	/	/	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	/	/	/	/	/	1000

Tested Item(s)	Result Unit (mg/kg)						Acceptable Limit Unit (mg/kg)
	22	23	24	25	26	27	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	/	/	/	/	N.D.	/	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	/	/	/	/	N.D.	/	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	/	/	/	/	N.D.	/	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	/	/	/	/	N.D.	/	1000

Tested Item(s)	Result Unit (mg/kg)						Acceptable Limit Unit (mg/kg)
	28	29	30	31	32	33	
Di-isobutyl phthalate(DIBP) CAS #:84-69-5	N.D.	N.D.	/	N.D.	/	/	1000
Dibutyl phthalate(DBP) CAS #:84-74-2	N.D.	N.D.	/	N.D.	/	/	1000
Benzylbutyl phthalate(BBP) CAS #:85-68-7	N.D.	N.D.	/	N.D.	/	/	1000
Di-2-ethylhexyl phthalate(DEHP) CAS #:117-81-7	N.D.	N.D.	/	N.D.	/	/	1000

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Note:

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

-Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm² sample surface area used.

-Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than 0.02 mg/kg with 50cm² sample surface area used.

-#According to the directive (2011/65/ EU), Lead is exempted as copper alloy containing up to 4% lead by weight.

Remark:

- The screening results are only used for reference.

- When conducting the test for PBBs & PBDEs, XRF was introduced to screen Br Exclusively;

- When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.

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CCTI TESTING

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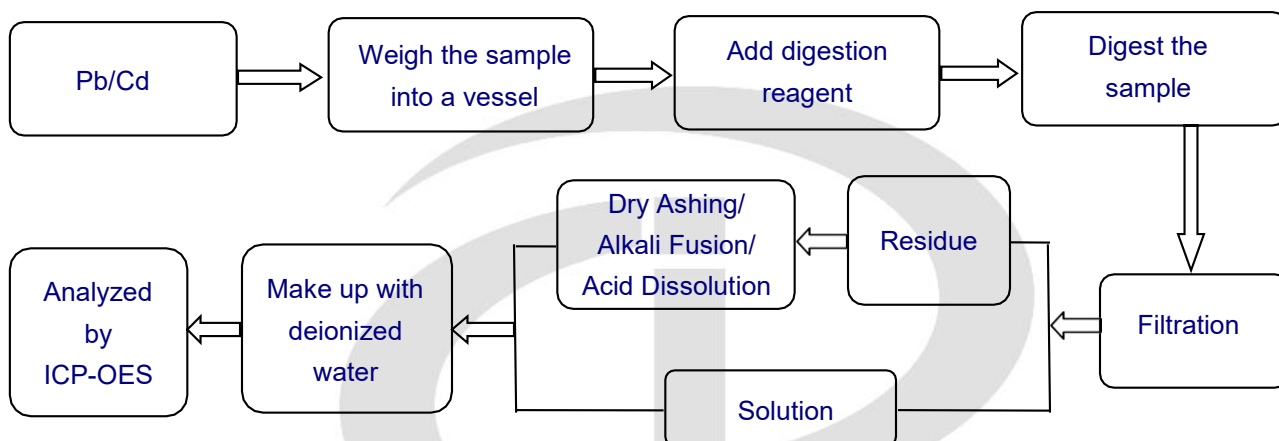
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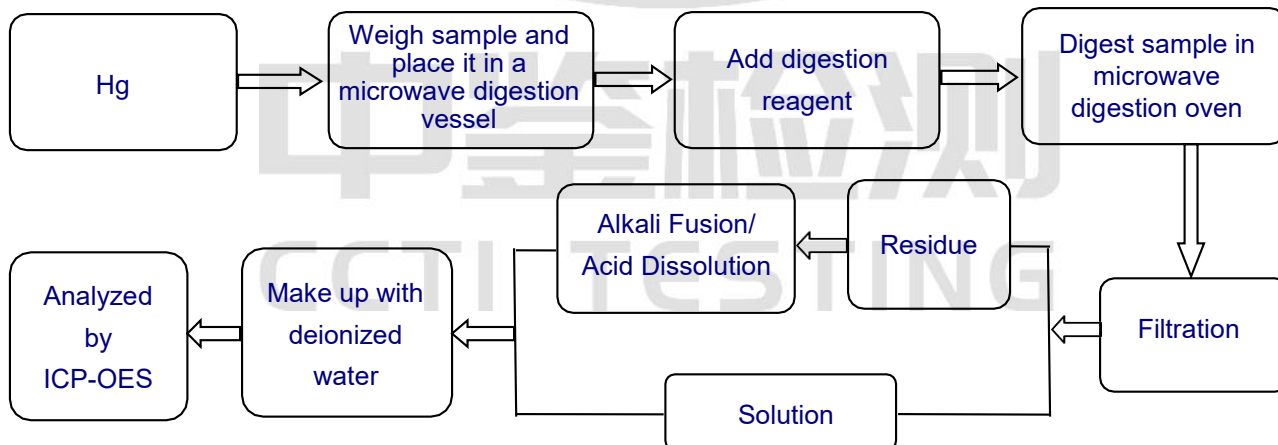
Test Process:

The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

◆ IEC 62321-5:2013 Ed.1.0



◆ IEC 62321-4:2013+AMD1:2017 Ed.1.0



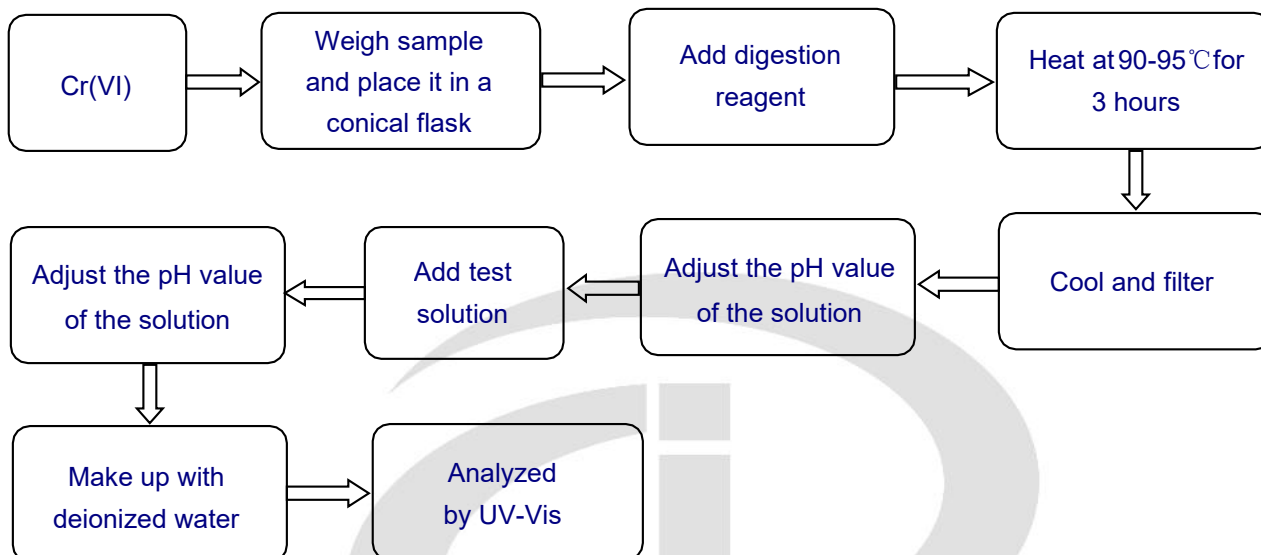
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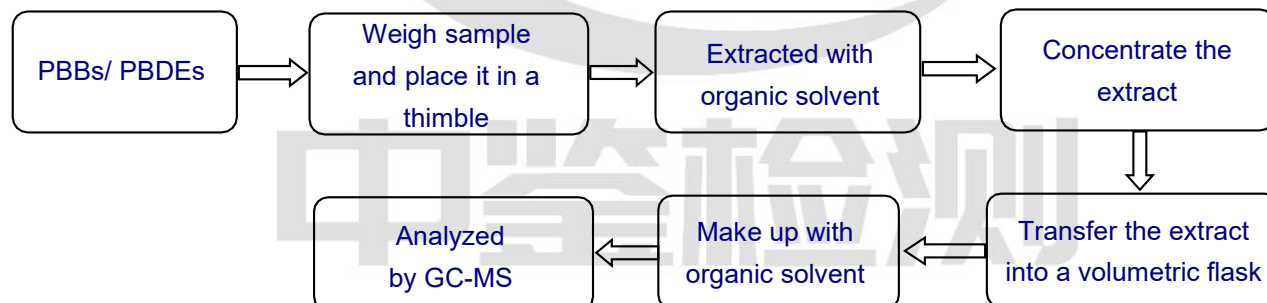
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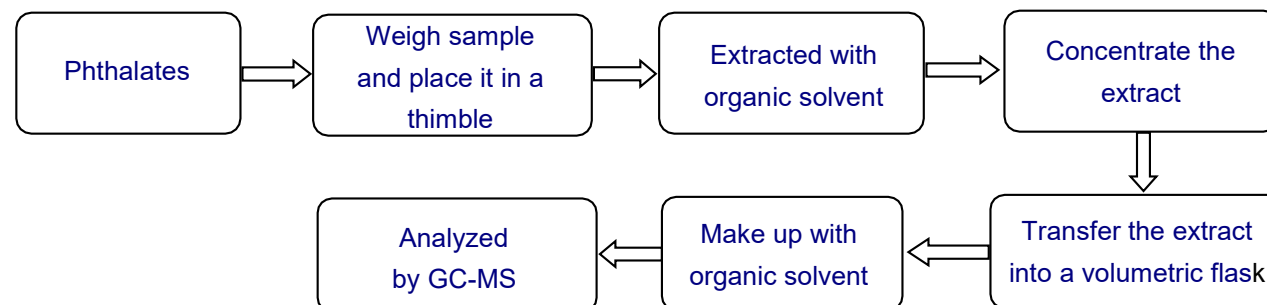
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◆ IEC 62321-6:2015 Ed.1.0



◆ IEC 62321-8:2017 Ed.1.0



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Photograph of Sample



Figure 1



Figure 2

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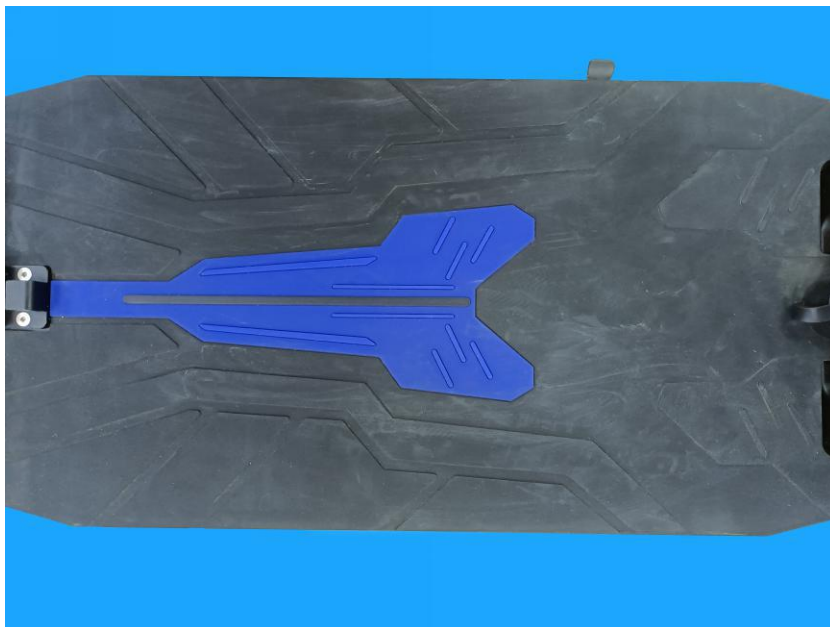


Figure 3



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Figure 5

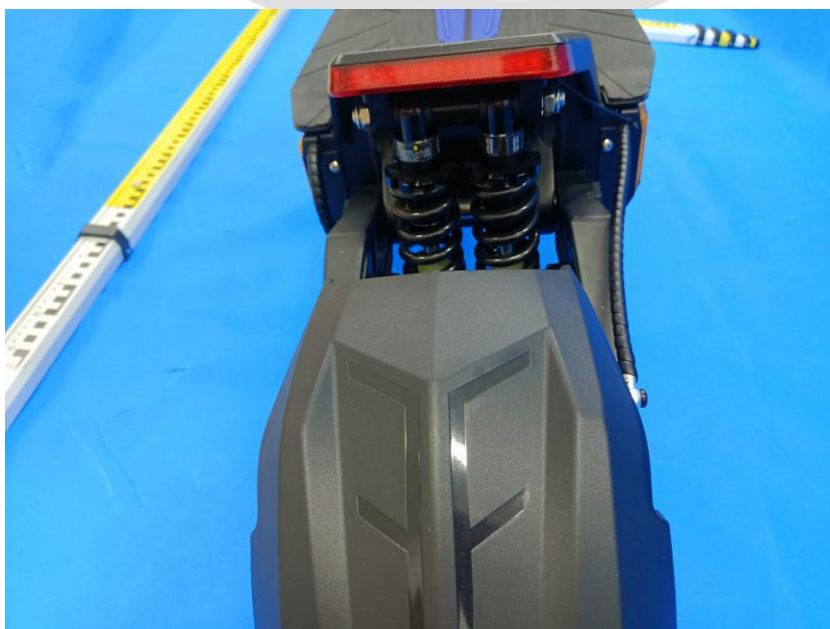


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Figure 7



Figure 8

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Figure 9



Figure 10

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Figure 11

***** End of Report *****

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