



TEST REPORT

Report No. : WTH23H05105301C
Applicant : GUANGDONG KEXIN ELECTRICAL CO.,LTD.
Address : No.6, Lane 3, Fuxin Road, Shantangwei, Pingdi Street, Longgang District, Shenzhen, Guangdong, China
Sample Name : SOT23
Client's Ref. Info. : Refer to next page (s)
Test Requested : As specified by client, to determine the Perfluoroalkyl and polyfluoroalkyl substances (PFAS) content in the sample with reference to Client's Limit.
Test Conclusion : PASS
Date of Receipt sample : 2023-05-16
Testing period : 2023-05-16 ~ 2023-05-20
Date of Issue : 2023-05-20
Test Result : Refer to next page (s)



Prepared By:

Shenzhen Hongcai Testing Technology Co., Ltd.

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 Tel: +86-755-84616666/400-0066-989 E-mail: service@hct-test.com

Signed for and on behalf of
 Shenzhen Hongcai Testing Technology Co., Ltd.

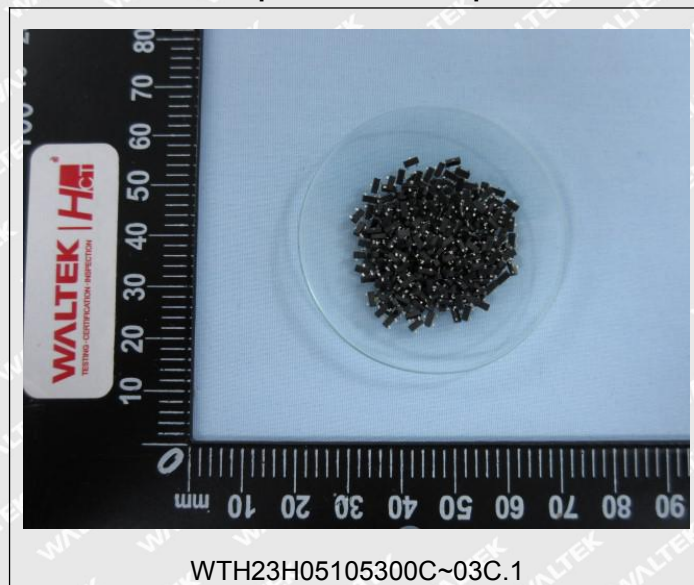


Michael Huang
 Shenzhen Hongcai Testing Technology Co., Ltd.
<http://www.hct-test.com>



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The photo of the sample



Client's Ref. Info:

SOT23-3/23-5/23/89-5/89/143/143R/153/163/323/343/343R/353/363/523/563/723/923/353/363/883,SOP4/14/16/18/20/24, TSSOP8/14/16/18/20/24, DFN/PDFN/QFN,SOD106/123/123F/123FL/123FH/323/323F/323FL/523/723/882/923.D015/27/34/35/41/123AB/201AD,TO92/126/220/220AB/220MF/220F/247/251/252/263/277,LL34/41/43/51,SMA/SMAF/SMB/SMBF/SMC, TO251,0402/0603/0805/1206,R1/3/6,DIP,1N/1Z,SC59/75,ABF/ABS/LBF/DBS/DBJ/DFS/KBL/GBL/GBJ/GBP/MBS/MSB/MLP/MDS/MBF/TWB/MB/TSB/WOB/WOG/KBP/KBU/KBPC/TS4B/RB-5





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Test Result(s):

Test Method/Equipment: CEN/TS 15968:2010(E)&HCT/SZ-SOP-YJ-PI035; LC-MS/MS; GC-MS

No.	Test Item(s)	CAS No.	Unit	MDL	Result(s)	Limit
1	Perfluorobutyric acid (PFBA)	375-22-4	mg/kg	0.025	ND	No detectable
2	Perfluoropentane Acid (PFPA)	2706-90-3	mg/kg	0.025	ND	No detectable
3	Perfluorohexane acid (PFHxA)	307-24-4	mg/kg	0.025	ND	No detectable
4	7H-Dodecanefluoroheptane Acid(HPFHpA)	1546-95-8	mg/kg	0.025	ND	No detectable
5	Perfluorobutane Sulfonate (PFBS)	375-73-5	mg/kg	0.025	ND	No detectable
6	Perfluorobutanesulfonate K-salt (PFBS-K)	29420-49-3	mg/kg	0.025	ND	No detectable
7	Perfluoroheptane Acid (PFHpA)	375-85-9	mg/kg	0.025	ND	No detectable
8	1H,1H,2H,2H-Perfluorooctanesulphonic acid (H4PFOS 6:2)	27619-97-2	mg/kg	0.025	ND	No detectable
9	Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.025	ND	No detectable
10	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	mg/kg	0.025	ND	No detectable
11	Sodium perfluorooctanoate (PFOA-Na)	335-95-5	mg/kg	0.025	ND	No detectable
12	Potassium perfluorooctanoate (PFOA-K)	2395-00-8	mg/kg	0.025	ND	No detectable
13	Silver perfluorooctanoate (PFOA-Ag)	335-93-3	mg/kg	0.025	ND	No detectable
14	Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	mg/kg	0.025	ND	No detectable
15	Tetrabutyl phosphonium 2H,2H-Perfluorodecanoate	882489-14-7	mg/kg	0.025	ND	No detectable
16	Perfluorohexane Sulfonate (PFHxS)	355-46-4	mg/kg	0.025	ND	No detectable
17	Perfluorohexanesulfonate Na-salt (PFHxS-Na)	82382-12-5	mg/kg	0.025	ND	No detectable
18	Perfluorohexanesulfonate K-salt (PFHxS-K)	3871-99-6	mg/kg	0.025	ND	No detectable
19	Perfluorononane Acid (PFNA)	375-95-1	mg/kg	0.025	ND	No detectable
20	Perfluorononanoate Na-Salt (PFNA-Na)	21049-39-8	mg/kg	0.025	ND	No detectable
21	Perfluorononanoate ammonium salt (APFN)	4149-60-4	mg/kg	0.025	ND	No detectable
22	Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6	mg/kg	0.025	ND	No detectable
23	Perfluoroheptane Sulfonate (PFHpS)	375-92-8	mg/kg	0.025	ND	No detectable
24	Perfluoroheptanesulfonate Na-salt (PFHpS-Na)	68555-66-8	mg/kg	0.025	ND	No detectable
25	Perfluorodecane Acid (PFDA)	335-76-2	mg/kg	0.025	ND	No detectable
26	Perfluorodecanoate Na-salt (PFDA-Na)	3830-45-3	mg/kg	0.025	ND	No detectable
27	Perfluorodecanoate ammonium salt (APFDA)	3108-42-7	mg/kg	0.025	ND	No detectable
28	2H,2H,3H,3H-Perfluoroundecanoic acid (4HPFUa)	34598-33-9	mg/kg	0.025	ND	No detectable





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No.	Test Item(s)	CAS No.	Unit	MDL	Result(s)	Limit
29	Perfluorooctane sulfonates (PFOS)	1763-23-1	mg/kg	0.025	ND	No detectable
30	Perfluorooctane Sulfonamide (PFOSA)	754-91-6	mg/kg	0.025	ND	No detectable
31	N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	mg/kg	0.025	ND	No detectable
32	N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	mg/kg	0.025	ND	No detectable
33	2-(N-methylperfluoro-1-octanesulfonamido) - ethanol (MeFOSE)	24448-09-7	mg/kg	0.025	ND	No detectable
34	2-(N-ethylperfluoro-1-octanesulfonamido) - ethanol (EtFOSE)	1691-99-2	mg/kg	0.025	ND	No detectable
35	Perfluorooctane Sulfonyl fluoride (POSF)	307-35-7	mg/kg	0.025	ND	No detectable
36	Potassium Perfluorooctanesulfonate (PFOS-K)	2795-39-3	mg/kg	0.025	ND	No detectable
37	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9	mg/kg	0.025	ND	No detectable
38	heptadecafluorooctane-1-sulfonate (PFOS-DDA)	251099-16-8	mg/kg	0.025	ND	No detectable
39	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8	mg/kg	0.025	ND	No detectable
40	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	mg/kg	0.025	ND	No detectable
41	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3	mg/kg	0.025	ND	No detectable
42	Perfluoroundecanoic Acid (PFUDA)	2058-94-8	mg/kg	0.025	ND	No detectable
43	Perfluorododecanoic Acid (PFDOA)	307-55-1	mg/kg	0.025	ND	No detectable
44	Perfluorodecane Sulfonate (PFDS)	335-77-3 /126105-34-8	mg/kg	0.025	ND	No detectable
45	Perfluorodecanesulfonate Na-salt (PFDS-Na)	2806-15-7	mg/kg	0.025	ND	No detectable
46	Perfluorodecanesulfonate K-salt (PFDS-K)	2806-16-8	mg/kg	0.025	ND	No detectable
47	Perfluoroaliphatic Dean-sulfonate salt of NH ₄ (PFDS-NH ₄)	67906-42-7	mg/kg	0.025	ND	No detectable
48	Perfluorotridecanoic Acid (PFTrA)	72629-94-8	mg/kg	0.025	ND	No detectable
49	Perfluorotetradecanoic Acid (PFTeA)	376-06-7	mg/kg	0.025	ND	No detectable
50	1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTS)	39108-34-4	mg/kg	0.025	ND	No detectable
51	Methyl perfluorooctanoate (Me-PFOA)	376-27-2	mg/kg	0.025	ND	No detectable
52	Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	mg/kg	0.025	ND	No detectable



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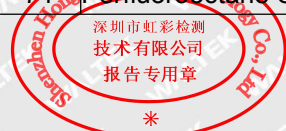
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No.	Test Item(s)	CAS No.	Unit	MDL	Result(s)	Limit
53	1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	mg/kg	0.025	ND	No detectable
54	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	mg/kg	0.025	ND	No detectable
55	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	mg/kg	0.025	ND	No detectable
56	Perfluoro-1-iodooctane (PFOI)	507-63-1	mg/kg	0.025	ND	No detectable
57	1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2	mg/kg	0.025	ND	No detectable
58	1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7	mg/kg	0.025	ND	No detectable
59	1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6	mg/kg	0.025	ND	No detectable
60	Perfluoro dodecyl acrylate (10:2 FTA)	17741-60-5	mg/kg	0.025	ND	No detectable
61	1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	865-86-1	mg/kg	0.025	ND	No detectable
62	1H,1H,2H,2H-Perfluorodecyltriethoxysilane (PFSI)	101947-16-4	mg/kg	0.025	ND	No detectable
63	1-Iodine-1H,1H,2H,2H-perfluorodecane (8:2 FIT)	2043-53-0	mg/kg	0.025	ND	No detectable
64	Bis (2-(perfluoroethyl)) phosphoric acid (8:2diPAP)	678-41-1	mg/kg	0.025	ND	No detectable
65	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propionic acid and its salts and acyl halides (HFPO-DA)	62037-80-3 / 13252-13-6/ 67118-55-2 / 2062-98-8	mg/kg	0.025	ND	No detectable
66	Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	mg/kg	0.025	ND	No detectable
67	Ammonium Undecafluorohexanoate (PFHxA-NH4)	21615-47-4	mg/kg	0.025	ND	No detectable
68	2H,2H-perfluorodecanoic acid	27854-31-5	mg/kg	0.025	ND	No detectable
69	Nonafluorobutane sulfonic acid hydrate	59933-66-3	mg/kg	0.025	ND	No detectable
70	Potassium perfluoroheptane sulfonate (PFHpS-K)	60270-55-5	mg/kg	0.025	ND	No detectable
71	2-Methyl-2-acrylic acid-3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctyl ester (6:2 FTMAC)	2144-53-8	mg/kg	0.025	ND	No detectable
72	N-(Heptadecafluorooctylsulfonyl)-N-methylglycine (N-MeFOSAA)	2355-31-9	mg/kg	0.025	ND	No detectable
73	N-ethyl-N-((heptadecafluorooctyl)sulfonyl)glycine (N-EtFOSAA)	2991-50-6	mg/kg	0.025	ND	No detectable
74	Perfluorooctane Sulfonate (PFOS-Na)	4021-47-0	mg/kg	0.025	ND	No detectable



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No.	Test Item(s)	CAS No.	Unit	MDL	Result(s)	Limit
75	Decanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10- octadecafluoro-9- (trifluoromethyl)-, ammonium salt	3658-63-7	mg/kg	0.025	ND	No detectable
76	Dodecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12, 12-docosafluoro-11-(trifluoromethyl)-	15811-52-6	mg/kg	0.025	ND	No detectable
77	N, N, N, - triethylethylamine 1,1,2,2,3,3,4,4-monofluorobutane-1-sulfonate	25628-08-4	mg/kg	0.025	ND	No detectable
78	Perfluorobutylsulfonyl fluoride	375-72-4	mg/kg	0.025	ND	No detectable
79	Ammonium perfluorohexanesulfonate (PFHxS-NH ₄)	68259-08-5	mg/kg	0.025	ND	No detectable
80	Lithium perfluorohexanesulfonate	55120-77-9	mg/kg	0.025	ND	No detectable
81	1-Hexaalkane sulfonic acid, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, 6, 6 - trifluoro -, zinc salt (PFHxS-Zn)	70136-72-0	mg/kg	0.025	ND	No detectable
82	Tetradecanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11, 12,12,13,14,14,14-hexacosafuoro-13- (trifluoromethyl)-	68025-62-7	mg/kg	0.025	ND	No detectable
83	Magnesium bis (perfluorooctane-1-sulfonic acid)	91036-71-4	mg/kg	0.025	ND	No detectable
84	Tetradecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12, 12,13,14,14,14-hexacosafuoro-13-(trifluorom ethyl)-	18024-09-4	mg/kg	0.025	ND	No detectable
85	Ammonium perfluorodecanoate	3793-74-6	mg/kg	0.025	ND	No detectable
86	1,1,2,2,3,3,4,4-tetrafluoro-N - (2-hydroxyethyl) - N-methyl-1-butylsulfonamide	34454-97-2	mg/kg	0.025	ND	No detectable
87	Perfluorooctanoic acid (PFODA)	16517-11-6	mg/kg	0.025	ND	No detectable
88	N-(perfluoro-1-octylsulfonyl) glycine	2806-24-8	mg/kg	0.025	ND	No detectable
89	Sodium perfluorinated nonane sulfonate	98789-57-2	mg/kg	0.025	ND	No detectable
90	1H, 1H, 2H, 2H perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4	mg/kg	0.025	ND	No detectable
91	Pentane acid, non fluorocarbon - (PFPeDA)	141074-63-7	mg/kg	0.025	ND	No detectable
92	1H, 1H, 2H, 2H methylperfluoroacrylate dodecyl ester (10:2 FTMA)	2144-54-9	mg/kg	0.025	ND	No detectable





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No.	Test Item(s)	CAS No.	Unit	MDL	Result(s)	Limit
93	Dodecanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12, 12-docosafluoro- 11-(trifluoromethyl)-	16486-96-7	mg/kg	0.025	ND	No detectable
94	Sodium perfluorooctanesulfonate	2483735-37-9	mg/kg	0.025	ND	No detectable
95	Sodium perfluorooctanesulfonate	630402-22-1	mg/kg	0.025	ND	No detectable
96	Potassium perfluoro caproate	3109-94-2	mg/kg	0.025	ND	No detectable
97	Sodium perfluoro caproate	2923-26-4	mg/kg	0.025	ND	No detectable
98	1H, 1H, 2H, 2H-perfluorodecyltrichlorosilane	78560-44-8	mg/kg	0.025	ND	No detectable
99	1H, 1H, 2H, 2H-Perfluorodecyltrimethoxysilane	83048-65-1	mg/kg	0.025	ND	No detectable
100	1H, 1H, 2H, 2H-Perfluorooctyl trichlorosilane	78560-45-9	mg/kg	0.025	ND	No detectable
101	Perfluorobutyl sulfonyl chloride	2991-84-6	mg/kg	0.025	ND	No detectable
102	Perfluorobutyl sulfonamide	30334-69-1	mg/kg	0.025	ND	No detectable
103	Lithium perfluorobutylsulfonate	131651-65-5	mg/kg	0.025	ND	No detectable
104	Potassium perfluoroanonanoate	21049-38-7	mg/kg	0.025	ND	No detectable
105	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11, 11,12,12,13,13,14,14-nonacosafuoro-14- iodo-	307-63-1	mg/kg	0.025	ND	No detectable
106	Potassium eicosfluoroundecanoate, 2,2,3,3,4,4,5,5,6,6,7,7,8,9,9,10,11,11	307-71-1	mg/kg	0.025	ND	No detectable

Note:

mg/kg (milligram per kilogram) = ppm (parts per million)

MDL=Method Detection Limit

ND=Not Detected

Sample Description:

No.	HCT Sample ID	Test Part Description	
1	WTH23H05105300C~03C.1	1	Black body



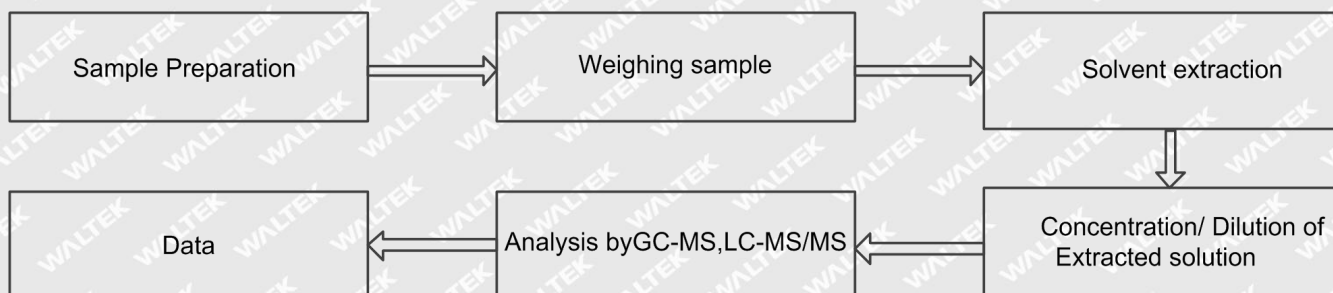
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Report No.: WTH23H05105301C

Test Flow Chart:



Statement:

1. This report is considered invalid without approved signature and special seal.
2. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which HCT hasn't verified.
3. The result(s)(conclusion) shown in this report refer(s) only to the sample(s) tested.
4. Without written approval of HCT, this report can't be reproduced except in full.
5. The result(s) in no CMA logo report shall only be used for client's scientific research, teaching, internal quality control, product research and development, etc..and just for internal reference.
6. The "n" in CNAS logo report means that the test item(s) was (were) currently not applying for CNAS accreditation.
7. Decision rules used in this report:
(1)According to the Decision rules in the regulations/standards listed in the Test Requested;
(2)If there is no Decision rules specified in the regulations listed in the Test Requested, then according to CNAS-GL015 Guidelines on Decision Rules and Statements of Conformity, 6.2.1, Simple Acceptance ($w=0$) of The binary Decision rule:
PASS (Accepted) - The measured value is within the tolerance interval.
FAIL (Rejected) - The measured value is outside the tolerance interval.

===== End of Report =====



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