

Test Report

No. SHAEC2216663411

Date: 09 Dec 2022

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Client Name : SICHUAN LIPTAI ELECTRONIC CO., LTD

Client Address : Electronic Industrial Park, Economic Development District SuiNing , SiChuan

Sample Name : Power elemen

Model No. : TO-220F

Client Ref. Information : TO-92 TO-126 TO-263 TO-262 TO-251 TO-252 TO-220 TO-220F TO-220HF
TO-247 TO-247L TO-277 TO-3P TO-220C GBU ABS MBS MBF DFN3*3
DFN5*6 DFN8*8 SOP8 ESOP SOT-223 TOLL

The above sample(s) and information were provided by the client.

SGS Job No. : CQ10022158 - CQ

Date of Sample Received : 29 Nov 2022

Testing Period : 29 Nov 2022 - 07 Dec 2022

Test Requested : Selected test(s) as requested by the client.

Test Method(s) : Please refer to next page(s).

Test Result(s) : Please refer to next page(s).

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Annie Liu

Annie Liu
Approved Signatory

scan to see the report



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t E&E (86-21) 61402553 f E&E (86-21) 64953679
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Test Result(s) :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	SHA22-166634.002	Black body part

Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) content

Test Method : With reference to CEN/TS15968:2010, analysis was performed by LC-MS or LC MS/MS and GC MS.

Test Item(s)	CAS NO.	Unit	MDL	002
Perfluorooctanoic Acid (PFOA) and its salts*	-	mg/kg	0.01	ND
1H,1H,2H,2H-Perfluorodecanesulphonic acid (8:2 FTS)	39108-34-4	mg/kg	0.01	ND
Perfluorooctane sulfonates (PFOS) and its salts/ derivative*	-	mg/kg	0.01	ND
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	mg/kg	0.01	ND
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	mg/kg	0.01	ND
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSE)	1691-99-2	mg/kg	0.01	ND
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (MeFOSE)	24448-09-7	mg/kg	0.01	ND
Perfluorooctane Sulfonamide (PFOSA)	754-91-6	mg/kg	0.01	ND
Perfluorononane Acid (PFNA) and its salts*	-	mg/kg	0.01	ND
Perfluorodecane Acid (PFDA) and its salts*	-	mg/kg	0.01	ND
Perfluoroundecanoic Acid (PFUdA)	2058-94-8	mg/kg	0.01	ND
Perfluorododecanoic Acid (PFDoA) and its salts*	-	mg/kg	0.01	ND
Perfluorotridecanoic Acid (PFTrA)	72629-94-8	mg/kg	0.01	ND
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	mg/kg	0.01	ND
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6	mg/kg	0.01	ND
Perfluorodecane Sulfonate (PFDS) and its salts*	-	mg/kg	0.01	ND
Perfluorobutyric acid (PFBA)	375-22-4	mg/kg	0.01	ND



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Test Item(s)	CAS NO.	Unit	MDL	002
Perfluorobutane Sulfonate (PFBS) and its salts*	-	mg/kg	0.01	ND
Perfluoropentanoic acid (PFPA)	2706-90-3	mg/kg	0.01	ND
Perfluorohexane acid (PFHxA) and its salts*	-	mg/kg	0.01	ND
Perfluorohexane Sulfonate (PFHxS) and its salts*	-	mg/kg	0.01	ND
Perfluoroheptanoic acid (PFHpA)	375-85-9	mg/kg	0.01	ND
Perfluoroheptanesulfonic Acid (PFHpS) and its salts*	-	mg/kg	0.01	ND
7H-Dodecafluoroheptanoic acid (HPFHpA)	1546-95-8	mg/kg	0.01	ND
2H,2H-Perfluorodecanoic acid	27854-31-5	mg/kg	0.01	ND
2H,2H,3H,3H-Perfluoroundecanoic acid (4HPFUnA)	34598-33-9	mg/kg	0.01	ND
1H,1H,2H,2H Perfluorooctanesulphonic acid (6:2 FTS)	27619-97-2	mg/kg	0.01	ND
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid (HFPO-DA) and its salts*	-	mg/kg	0.01	ND
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its acyl halides (HFPO-DA-F)	2062-98-8	mg/kg	0.01	ND
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2 FTS)	757124-72-4	mg/kg	0.01	ND
N-(Perfluoro-1-octanesulfonyl) Glycine	2806-24-8	mg/kg	0.01	ND
N-Methylperfluoro-1-octanesulfonamidoacetic Acid	2355-31-9	mg/kg	0.01	ND
N-Ethyl-N-(perfluoro-1-octanesulfonyl) Glycine	2991-50-6	mg/kg	0.01	ND
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	mg/kg	0.01	ND
Perfluorononane sulfonic acid (PFNS)	68259-12-1	mg/kg	0.01	ND
Perfluoroundecane sulfonic acid (PFUnS)	749786-16-1	mg/kg	0.01	ND
Perfluorododecane sulfonic acid (PFDoDS)	79780-39-5	mg/kg	0.01	ND
Perfluorotridecane sulfonic acid (PFTrDS)	791563-89-8	mg/kg	0.01	ND
2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	mg/kg	0.05	ND
3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	mg/kg	0.05	ND
Perfluorohexadecanoic Acid (PFHxDA)	67905-19-5	mg/kg	0.01	ND
Perfluorooctadecanoic Acid (PFODA)	16517-11-6	mg/kg	0.01	ND
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate (H ₂ PFDA)	882489-14-7	mg/kg	0.01	ND
bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorod ecyl) hydrogen phosphate(8:2diPAP)	678-41-1	mg/kg	0.01	ND
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	mg/kg	0.1	ND
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	mg/kg	0.1	ND
Perfluoro-1-iodooctane (PFOI)	507-63-1	mg/kg	0.1	ND



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中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

tE&E (86-21) 61402553 fE&E (86-21) 64953679
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Test Item(s)	CAS NO.	Unit	MDL	002
1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7	mg/kg	0.1	ND
1-Iodo-1H,1H,2H,2H-perfluorodecane (8:2 FTI)	2043-53-0	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMAC)	2144-53-8	mg/kg	0.1	ND
1H,1H,2H,2H-Perfluorodecyltriethoxysilane (PFSI)	101947-16-4	mg/kg	0.1	ND

Notes :

(1) PFOA and its salts* including PFOA(335-67-1),APFO(3825-26-1),PFOA-Na(335-95-5),PFOA-K(2395-00-8),PFOA-Ag(335-93-3) and PFOA F(335-66-0).The result of PFOA is used to represent PFOA and its salts.

PFOS and its salts/derivatives* including PFOS(1763-23-1),POSF(307-35-7),PFOS-K(2795-39-3),PFOS-NH₄(29081-56-9),PFOS-DDA(251099-16-8),PFOS-NH(OH)₂(70225-14-8),PFOS-Li(29457-72-5),PFOS-N(C₂H₅)₄(56773-42-3) and PFOS-Na(4201-47-0).The result of PFOS is used to represent PFOS and its salts/derivatives.

PFNA and its salts* including PFNA(375-95-1),PFNA-Na(21049-39-8) and APFN(4149-60-4).The result of PFNA is used to represent PFNA and its salts.

PFDA and its salts* including PFDA(335-76-2),PFDA Na(3830-45-3) and APFDA(3108-42-7).The result of PFDA is used to represent PFDA and its salts.

PFDoA and its salts* including PFDoA(307-55-1) and PFDoA-NH₄(3793-74-6).The result of PFDoA is used to represent PFDoA and its salts.

PFDS and its salts* including PFDS(335-77-3),PFDS-Na(2806-15-7),PFDS K(2806-16-8) and PFDS NH₄(67906-42-7),The result of PFDS is used to represent PFDS and its salts.

PFBS and its salts* including PFBS(375-73-5),PFBS-K(29420-49-3) and PFBS-H₂O(59933-66-3).The result of PFBS is used to represent PFBS and its salts.

PFHxA and its salts* including PFHxA(307-24-4) and PFHxA-NH₄* (21615-47-4).The result of PFHxA is used to represent PFHxA and its salts.

PFHxS and its salts* including PFHxS(355-46-4),PFHxS-Na(82382-12-5) and PFHxS K(3871-99-6).The result of PFHxS is used to represent PFHxS and its salts.

PFHpS and its salts* including PFHpS(375-92-8),PFHpS-Na(68555-66-8) and PFHpS-K(60270-55-5).The result of PFHpS is used to represent PFHpS and its salts.

HFPO-DA and its salts* including HFPO-DA(13252-13-6),HFPO-DA-K(67118-55-2) and HFPO-DA-NH₄(CAS.62037-80-3).The result of HFPO-DA is used to represent HFPO-DA and its salts.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



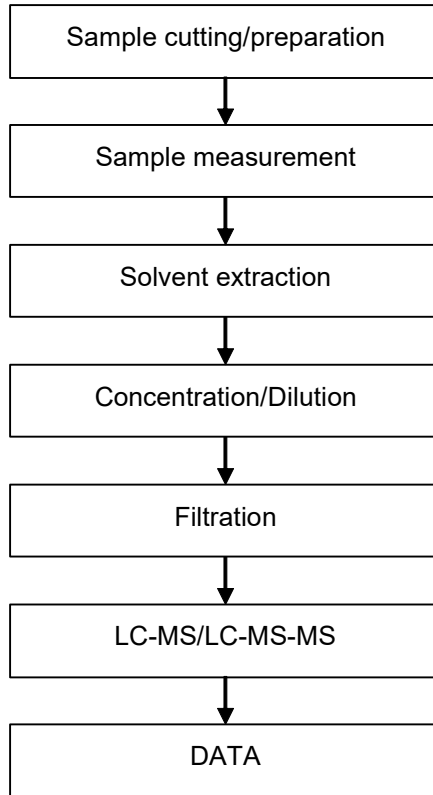
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ATTACHMENTS

PFASs/ PFOS/PFOA Testing Flow Chart



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