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JSB TECH PTE LTD 100 PASIR PANJANG ROAD #06-02, 100 PASIR PANJANG, SINGAPORE 118518

The following sample(s) was/were submitted and identified by the applicant as:

Sample Submitted By : JSB Tech Pte Ltd

Sample Name : Digi-Pas® DWL Digital Level Series

Sample Receiving Date : 16-Feb-2024

Testing Period : 16-Feb-2024 to 29-Feb-2024

Test Results : Please refer to the following pages.

Test Requested	Summary
As requested by the client, the risk of specific PFAS in the selected sample is evaluated. The total amounts of evaluated PFAS are 235 items, concluding 92tested items and 143 listed items (see remark). The summary of evaluated results are displayed in right table.	Not Detected

Signed for and on behalf of SGS Testing & Control Services Singapore Pte Ltd

Candice Sue

Technical Specialist Mobile: +65 9729 8692 Email: candice.sue@sgs.com

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
PFAS				No. 1
Perfluorobutane acid and its salts (PFBA	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
and its salts)	2010, analysis was performed by	mg/ng	0.01	14.5.
(CAS No.: 375-22-4 and its salts)	LC/MS/MS.			
Perfluorobutane sulfonate and itssalts	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
(PFBS and its salts)	2010, analysis was performed by	3 3		
(CAS No.:375-73-5 and its salts)	LC/MS/MS.			
Perfluorobutane sulfon amides	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
(CAS No.: 30334-69-1)	2010, analysis was performed by			
,	LC/MS/MS.			
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
hydroxyethyl)-N-methylbutane-1	2010, analysis was performed by			
sulphonamide (PFBS-NC3H8O)	LC/MS/MS.			
(CAS No.: 34454-97-2)				
1H,1H,2H,2H-Perfluorohexyl methacrylate	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
(4:2 FTMA)	2010, analysis was performed by			
(CAS No.:1799-84-4)	GC/MS.			
Perfluoropentane acid and its salts (PFPA	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
and its salts)	2010, analysis was performed by			
(CAS No.: 2706-90-3 and its salts)	LC/MS/MS.			
Perfluorohexane acid and its salts (PFHxA	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
and its salts)	2010, analysis was performed by			
(CAS No.: 307-24-4 and its salts)	LC/MS/MS.			
1H,1H,2H,2H-Perfluoro-1-	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
octanol(6:2FTOH)	2010, analysis was performed by			
(CAS No.: 647-42-7)	GC/MS.			
1H,1H,2H,2H-	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
Perfluorooctylacrylate(6:2FTA)	2010, analysis was performed by			
(CAS No.: 17527-29-6)	GC/MS.			
1H,1H,2H,2H-Perfluorooctyl methacrylate	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
(6:2 FTMAC)	2010, analysis was performed by			
(CAS No.:2144-53-8)	GC/MS.			

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
				No. 1
1H,1H,2H,2H-Perfluorooctanesulphonic acid	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
andits salts (6:2 FTS and its salts)	2010, analysis was performed by			
(CAS No.: 27619-97-2 and its salts)	LC/MS/MS.			
1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
iodooctane (6:2 FTI)	2010, analysis was performed by			
(CAS No.:2043-57-4)	GC/MS.			
Perfluorohexane sulfonate and itssalts (PFHxS	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
and its salts)	2010, analysis was performed by			
(CAS No.:355-46-4 and its salts)	LC/MS/MS.			
N-Methylperfluoro-1-hexanesulfonamide (N-Me-	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
FHxSA)	2010, analysis was performed by			
(CAS No.: 68259-15-4)	LC/MS/MS.			
Perfluorohexane sulfonamide (PFHxSA) (CAS	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
No.: 41997-13-1)	2010, analysis was performed by			
	LC/MS/MS.			
N-[3-(dimethylamino)propyl]	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
tridecafluorohexanesulphonamide (N-AP-	2010, analysis was performed by			
FHxSA)	LC/MS/MS.			
(CAS No.: 50598-28-2)				
2-[Methyl[(tridecafluorohexyl)	With reference to CEN/TS 15968:	mg/kg	0.5	N.D.
sulphonyl]amino]ethyl acrylate (N-MeFHSEA)	2010, analysis was performed by			
(CAS No.: 67584-57-0)	GC/MS.			
2-Propenoic acid, 2-methyl-, 2-	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-	2010, analysis was performed by			
tridecafluorohexyl)sulfonyl]amino]ethyl ester	GC/MS.			
(CAS No.: 67584-61-6)				
2-Propenoic acid, 2-methyl-, 2-	With reference to CEN/TS 15968:	mg/kg	0.1	N.D.
[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-	2010, analysis was performed by			
tridecafluorohexyl)sulfonyl]amino]ethyl ester	GC/MS.			
(CAS No.: 67906-70-1)				
1-Hexanesulfonamide, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, 6, 6, 6-	With reference to CEN/TS 15968:	mg/kg	0.01	N.D.
tridecafluoro-N-(2-hydroxyethyl)-N-methyl-	2010, analysis was performed by			
(MeFHxSE)	LC/MS/MS.			
(CAS No.: 68555-75-9)				

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result No. 1
Glycine, N-ethyl-N-(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]-(CAS No.: 68957-32-4)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoroheptane acid and its salts(PFHpA and its salts) (CAS No.: 375-85-9 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
7H-Dodecanefluoroheptane acidand its salts (HPFHpA and its salts) (CAS No.: 1546-95-8 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoroheptane sulfonate and itssalts (PFHpS and its salts) (CAS No.:375-92-8 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorooctane sulfonates and itssalts (PFOS and its salts) (CAS No.:1763-23-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-ethylperfluoro-1-octanesulfonamide (EtFOSA) (CAS No.: 4151-50-2)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-Methyl- Perfluoroctanesulfonamide (N-Me-FOSA) (CAS No.: 31506-32-8)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-Ethyl-Perfluoroctanesulfonamidoethanol (N-Et-FOSE alcohol) (CAS No.: 1691-99-2)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol) (CAS No.:24448-09-7)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoroctanesulfonamide and itssalts (PFOSA and its salts) (CAS No.:754-91-6 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorooctanoic acid and its salts (PFOA and its salts) (CAS No.: 335-67-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
. ,				No. 1
Methyl perfluorooctanoate (Me-PFOA) (CAS No.: 376-27-2)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Ethyl perfluorooctanoate (Et-PFOA) (CAS No.: 3108-24-5)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Perfluoro-1-iodooctane (PFOI) (CAS No.: 507-63-1)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
3-Perfluoroheptyl propanoic acid (7:3 FTCA) (CAS No.: 812-70-4)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid and itssalts (8:2 FTS and its salts) (CAS No.:39108-34-4 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH) (CAS No.: 678-39-7)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA) (CAS No.: 27905-45-9)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA) (CAS No.:1996-88-9)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
2H,2H-Perfluorodecane acid and itssalts (H2PFDA and its salts) (CAS No.:27854-31-5 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluorodecyl iodide (8_2 FTI) (CAS No.: 2043-53-0)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTSi(OC2H5)3) (CAS No.: 101947-16-4)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
2H,2H,3H,3H-PerfluoroundecanoicAcid and its salts (4HPFUnA and itssalts) (CAS No.: 34598-33-9 and itssalts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H-Heptadecafluoro-1-decene (PFDE) (CAS No.: 21652-58-4)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result No. 1
Bis(1H,1H,2H,2H-Perfluorodecyl) phosphate and itssalts (8_2diPAP and its salts) (CAS No.: 678-41-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorononan-1-oic acid and its salts (PFNA and its salts) (CAS No.:375-95-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA) (CAS No.: 172155-07-6)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorodecane acid and its salts (PFDA and its salts) (CAS No.: 335-76-2 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoroundecanoic acid and its salts (PFUnDA and its salts) (CAS No.:2058-94-8 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorododecanoic acid and its salts (PFDoDA and its salts) (CAS No.:307-55-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorodecane sulfonate and its salts (PFDS and its salts) (CAS No.:335-77-3 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Pentacosafluorotridecanoic acid and its salts (PFTrDA and its salts) (CASNo.: 72629-94-8 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorotetradecanoic acid and itssalts (PFTDA and its salts) (CAS No.:376-06-7 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2FTOH) (CAS No.: 865-86-1)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2FTA) (CAS No.: 17741-60-5)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA) (CAS No.:2144-54-9)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.

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Test Item(s)	Method	Unit	MDL	Result No. 1
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH) (CAS No.: 39239-77-5)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic acid (10:2 FTS) (CAS No.:120226-60-0)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI) (CAS No.: 2043-54-1)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI) (CAS No.: 30046-31-2)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Perfluorononane sulfonic acid and its salts (PFNS and its salts) (CAS No.: 68259-12-1 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoroundecane sulfonic acid and its salts (PFUnDS and its salts) (CAS No.: 749786-16-1, 441296-91-9 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorododecane sulfonic acid and its salts (PFDoDS and its salts) (CAS No.: 79780-39-5 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorotridecane sulfonic acid and its salts (PFTrDS and its salts) (CAS No.: 791563-89-8 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
10:2 Fluortelomerphosphatediester (10:2 diPAP) (CAS No.: 1895-26-7)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorododecyl iodide (PFDoDI) (CAS No.: 307-60-8)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Perfluorodecyl iodide (PFDI) (CAS No.: 423-62-1)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Perfluoropentadecanoic acid and its salts (PFPeDA and its salts, C15) (CAS No.: 141074-63-7 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.

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Test Item(s)	Method	Unit	MDL	Result No. 1
Perfluorohexadecanoic acid and its salts (PFHxDA and its salts, C16) (CAS No.: 67905-19-5 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorooctadecanoic acid and its salts (PFODA and its salts, C18) (CAS No.: 16517-11-6 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoro-3-methoxypropanoic acid (PFMPA) (CAS No.: 377-73-1)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoro-4-methoxybutanoic acid (PFMBA) (CAS No.: 863090-89-5)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) (CAS No.: 151772-58-6)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
4,8-Dioxa-3H-perfluorononanoic acid (ADONA) (CAS No.: 919005-14-4)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2FTOH) (CAS No.: 2043-47-2)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
2,3,3,3-tetrafluoro-2- (heptafluoropropoxy)propionic acide and its salts (HFPO-DA and its salts) (CAS No.: 13252-13-6 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid and its salts (4:2 FTS and its salts) (CAS No.:757124-72-4 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorooctane sulfonamidoaceticacid (FOSAA) (CAS No.: 2806-24-8)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-methylperfluorooctane sulfonamidoacetic acid (N-MeFOSAA) (CAS No.: 2355-31-9)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
N-ethylperfluorooctane sulfonamidoacetic acid (N-EtFOSAA) (CAS No.: 2991-50-6)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.

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Test Result(s)

Test Item(s)	Method	Unit	MDL	Result No. 1
Perfluoropentane sulfonic acid and its salts (PFPeS and its salts) (CAS No.: 2706-91-4 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
3-Perfluoropropyl propanoic acid (3:3 FTCA) (CAS No.: 356-02-5)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
2-Perfluorohexyl ethanoic acid (6:2FTCA) (CAS No.: 53826-12-3)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
3-Perfluoropentyl propanoic acid (5:3 FTCA) (CAS No.: 914637-49-3)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluoro(2-ethoxyethane) sulfonicacid (PFEESA) (CAS No.: 113507-82-7)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
9-Chlorohexadecafluoro-3- oxanonane-1-sulfonic acid (9CI-PF3ONS) (CAS No.: 756426-58-1)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) (CAS No.: 763051-92-9)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
2-(N-ethylperfluorooctanesulfamido)ethylacrylate (EtFOSAC) (CAS No.: 423-82-5)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
Perfluorooctyl triethoxysilane (POTS) (CAS No.: 51851-37-7)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	0.1	N.D.
11H-Perfluoroundecanoic acid and its salts (11H-PFUnDA and its salts) (CAS No.: 1765-48-6 and its salts)	With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.	mg/kg	0.01	N.D.
Perfluorohexyl iodide (PFHxI) (CAS No.: 355-43-1)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	1	N.D.
Perfluorohexyl ethylene (PFHxE) (CAS No.: 25291-17-2)	With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.	mg/kg	1	N.D.

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Remark:

The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it does not include all PFAS salts with the same carbon number group.)

Group Name	Substance Name	CAS No.
	Perfluorobutane acid (PFBA)	375-22-4
	Ammonium perfluorobutanoate (PFBA-NH ₄)	10495-86-0
PFBA, its salts	Sodium perfluorobutanoate (PFBA-Na)	2218-54-4
	Potassium heptafluorobutanoate (PFBA-K)	2966-54-3
	Silver perfluorobutanoate (PFBA-Ag)	3794-64-7
	Lithium perfluorobutanoate (PFBA-Li)	4146-76-3
	Perfluorobutane sulfonate (PFBS)	375-73-5
	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-	60453-92-1
	nonafluoro-,sodium salt (1:1) (PFBS-Na)	
	Lithium perfluorobutanesulfonate (PFBS-Li)	131651-65-5
	Magnesium perfluorobutanesulfonate (PFBS-Mg)	507453-86-3
	Perfluorobutane Sulfonate K-salt (PFBS-K)	29420-49-3
	Perfluorobutane sulfonyl fluoride (PFBS-F)	375-72-4
DEDC its salts 0 devicestives	Tetraethylammonium	25628-08-4
PFBS, its salts & derivatives	perfluorobutanesulfonate(PFBS-N(CH ₃ CH ₂) ₄)	
	Triphenylsulfanium perfluorobutane sulfonate (TPS-PFBS)	144317-44-2
	Dimethyl(phenyl) sulfanium perfluorobutane sulfonate	220133-51-7
	Tetrabutyl-phosphonium nonafluoro-butane-1- sulfonate	220689-12-3
	Morpholinium perfluorobutanesulfonate	503155-89-3
	Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate (PFBS-NH ₄)	68259-10-9
	Nonafluorobutanesulfonic acidHydrate	59933-66-3
	Nonafluoro-1-butanesulfonyl chloride (PFBS-CI)	2991-84-6
	Bis(4-tert-butylphenyl)iodonium perfluoro-1- butanesulfonate (PFBS-I(C ₆ H ₄) ₂ (C ₄ H ₉) ₂)	194999-85-4

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Group Name	Substance Name	CAS No.
PFBS, its salts & derivatives	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid, compound with 2,2'-iminodiethanol (1:1) (PFBS-NH(C ₂ H ₅ O) ₂)	70225-18-2
	1-(4-butoxy-1-naphthyl) tetrahydrothiopheniumnonafluorobutane-1- sulfonate (PFBS-SC ₁₈ H ₂₃ O)	209482-18-8
	Perfluoropentane acid (PFPA)	2706-90-3
	Sodium perfluoropentanoate (PFPA-Na)	2706-89-0
PFPA, its salts	Potasium perfluoropentanoate (PFPA-K)	68259-11-0
	Ammonium perfluoropentanoate (PFPA-NH ₄)	68259-11-0
	Lithium perfluoropentanoate (PFPA-Li)	198482-22-3
	Silver perfluoropentanoate (PFPA-Ag)	2795-30-4
	Perfluorohexane acid (PFHxA)	307-24-4
	Ammonium perfluorohexanoate (PFHxA-NH ₄)	21615-47-4
PFHxA, its salts & derivatives	Sodium perfluorohexanoate (PFHxA-Na)	2923-26-4
	Potassium perfluorohexanoate (PFHxA-K)	3109-94-2
	Perfluorohexanoyl fluoride (PFHxA-F)	355-38-4
	Silver perfluorohexanoate (PFHxA-Ag)	336-02-7
	Lithium perfluorohexanoate (PFHxA-Li)	90430-61-8
	1H,1H,2H,2H-Perfluorooctanesulphonic acid (6:2 FTS)	27619-97-2
	Sodium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2FTS-Na)	27619-94-9
6:2 FTS, its salts	Potassium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2FTS-K)	59587-38-1
	Ammonium 1H,1H,2H,2H- Perfluorooctanesulfonate (6:2 FTS-NH ₄)	59587-39-2
	1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-, barium salt (2:1) (6:2 FTS-Ba)	1807944-82-6
	Perfluorohexane sulfonate (PFHxS)	355-46-4
	Perfluorohexanesulfonate Na-salt (PFHxS-Na)	82382-12-5
	Perfluorohexanesulfonate K-salt (PFHxS-K)	3871-99-6
DELLO its selfs to be institute	Ammonium perfluorohexanesulfonate (PFHxS-NH ₄)	68259-08-5
PFHxS, its salts & derivatives	Perfluorohexanesulfonate Li-salt (PFHxS-Li)	55120-77-9
	Perfluorohexanesulfonate Zn-salt (PFHxS-Zn)	70136-72-0
	Perfluorohexanesulfonate sulfonyl fluoride (PFHxS-F)	423-50-7
	Phosphonium, triphenyl(phenylmethyl)-,1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3

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Group Name	Substance Name	CAS No.
	N,N,N-tributylbutan-1-aminium	108427-54-9
	tridecafluorohexane-1-sulfonate	
	N,N,N-triethylethanaminium tridecafluorohexane-	108427-55-0
	1-sulfonate (1:1)	
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-	1187817-57-7
	tridecafluoro-, compd. With pyrrolidine (1:1)	
	Ethanaminium, N-[4-[[4-(diethylamino) phenyl][4-	1310480-24-0
	(ethylamino)-1-naphthalenyl]methylene]-2,5-	
	cyclohexadien-1-ylidene]-N-	
	ethyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonate (1:1)	
	Methanaminium, N-[4-[[4-(dimethylamino) phenyl]	1310480-27-3
	[4-(ethylamino)-1-naphthalenyl] methylene]-2,5-	
	cyclohexadien-1-ylidene]-N-	
	methyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonate (1:1)	
	Methanaminium, N-[4-[[4-(dimethylamino) phenyl]	1310480-28-4
	[4-(phenylamino)-1-naphthalenyl] methylene]-2,5-	
	cyclohexadien-1-ylidene]-N-	
	methyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonate (1:1)	
	Beta-Cyclodextrin, compd. with	1329995-45-0
PFBS, its salts & derivatives	1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
FFDS, its saits & derivatives	hexanesulfonic acid ion (1-) (1:1)	
	Gamma-Cyclodextrin, compd. With	1329995-69-8
	1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonicacid ion (1-) (1:1)	
	Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-	144116-10-9
	tridecafluoro-1-hexanesulfonate (1:1)	
	Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-	1462414-59-0
	diphenylethenyl) phenyl]-1,2,3,3a,4,8b-	
	hexahydrocyclopent[b]indol-7-yl]	
	ethenyl]-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonate (1:1)	450440.05.5
	lodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-	153443-35-7
	tridecafluoro-1-hexanesulfonate (1:1)	
	Methanaminium, N,N,N-trimethyl-, salt with	189274-31-5
	1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-	
	hexanesulfonicacid (1:1)	

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Group Name	Substance Name	CAS No.
PFBS, its salts & derivatives	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine(1:1)	202189-84-2
	lodonium, bis[4-(1,1-dimethylethyl) phenyl]-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	213740-81-9
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)	341035-71-0
	Sulfonium, bis (4-methylphenyl) phenyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1- hexanesulfonate (1:1)	341548-85-4
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium (3+) salt (3:1) (PFHxS-Sc)	350836-93-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium (3+) salt (3:1) (PFHxS-Nd)	41184-65-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium (3+) salt (3:1) (PFHxS-Y)	41242-12-0
	Sulfonium, (thiodi-4,1-phenylene) bis [diphenyl-, saltwith 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)	421555-73-9
	lodonium, bis [4-(1,1-dimethylpropyl) phenyl]-, salt with1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonicacid	421555-74-0
	Sulfonium, tris[4-(1,1-dimethylethyl) phenyl]-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	425670-70-8
	Tridecafluorohexanesulphonic acid, compound with2,2'-iminodiethanol (1:1)	70225-16-0
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N, N-diethylethanamine (1:1)	72033-41-1
	lodonium, bis[(1,1-dimethylethyl) phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonicacid (1:1) (9CI)	866621-50-3

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Group Name	Substance Name	CAS No.
PFBS, its salts & derivatives	Sulfonium, (4-methylphenyl) diphenyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1- hexanesulfonate (1:1)	910606-39-2
	Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl) oxy] phenyl] diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	911027-68-4
	1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1) (PFHxS-CsH)	92011-17-1
	Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	928049-42-7
	Perfluorohexylsulfonyl chloride (PFHxS-CI)	55591-23-6
	Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo [3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl2-methyl-2-propenoate	911027-69-5
PFHpA, its salts	Perfluoroheptane acid (PFHpA)	375-85-9
	Sodium perfluoroheptanoate (PFHpA-Na)	20109-59-5
	Potassium perfluoroheptanoate (PFHpA-K)	21049-36-5
	Ammonium perfluoroheptanoate (PFHpA-NH4)	6130-43-4
	Cesium perfluoroheptanoate (PFHpA-Cs)	171198-24-6
	Silver perfluoroheptanoate (PFHpA-Ag)	424-05-5
	Lithium perfluoroheptanoate (PFHpA-Li)	60871-90-1
HPFHpA, its salts	7H-Dodecanefluoroheptane acid (HPFHpA)	1546-95-8
, ,	Sodium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-Na)	2264-25-7
PFHpS, its salts	Perfluoroheptane sulfonate (PFHpS)	375-92-8
	Perfluoroheptanesulfonate Na-salt (PFHpS-Na)	21934-50-9
	Potassium perfluoroheptanesulfonate (PFHpS-K)	60270-55-5
	Ammonium perfluoroheptanesulfonate (PFHpS-NH ₄)	68259-07-4
	Lithium perfluoroheptanesulfonate (PFHpS-Li)	117806-54-9

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Group Name	Substance Name	CAS No.
PFOS, its salts & derivatives	Perfluorooctane sulfonates (PFOS)	1763-23-1
	Potassium perfluorooctanesulfonate (PFOS-K)	2795-39-3
	Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5
	Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9
	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8
	Perfluorooctanesulfonic acid,tetraethylammonium salt(PFOS-N(C ₂ H ₅) ₄)	56773-42-3
	N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane- 1-sulfonate (PFOS-DDA)	251099-16-8
	Perfluorooctane sulfonyl fluoride (POSF)	307-35-7
	Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4
	Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate	71463-74-6
PFOSA, its salts	Perfluoroctanesulfonamide (PFOSA)	754-91-6
	Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9
PFOA, its salts & derivatives	Perfluorooctanoic acid (PFOA)	335-67-1
	Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	Silver perfluorooctanote (PFOA-Ag)	335-93-3
	Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
8:2 FTS, its salts	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4
	1H,1H,2H,2H-Perfluorodencane sulfonate acid Potassium salt (8:2 FTS-K)	438237-73-1
	1H,1H,2H,2H-Perfluorodencane sulfonate acidAmmonium salt (8:2 FTS-NH ₄)	149724-40-3
	1H,1H,2H,2H-Perfluorodencane sulfonate acid Sodiumsalt (8:2 FTS-Na)	27619-96-1

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Group Name	Substance Name	CAS No.
PFNA, its salts	Perfluorononan-1-oic acid (PFNA)	375-95-1
	Perfluorononanoate Na-salt (PFNA-Na)	21049-39-8
	Perfluorononanoate ammounium salt (APFN)	4149-60-4
	Potassium perfluorononanoate (PFNA-K)	21049-38-7
	Perfluorononanoate Li-Salt (PFNA-Li)	60871-92-3
	Silver perfluorononanoate (PFNA-Ag)	7358-16-9
PFDA, its salts	Perfluorodecane acid (PFDA)	335-76-2
	Perfluorodecanoate Na-salt (PFDA-Na)	3830-45-3
	Perfluorodecanoate ammonium salt (APFDA)	3108-42-7
	Potassium perfluorodecanoate (PFDA-K*)	51604-85-4
	Silver perfluorodecanoate (PFDA-Ag)	5784-82-7
	Lithium perfluorodecanoate (PFDA-Li)	84743-32-8
PFUnDA, its salts	Perfluoroundecanoic acid (PFUnDA	2058-94-8
	Ammonium perfluoroundecanoate (PFUnDA-NH ₄)	4234-23-5
	Perfluoroundecanoic acid sodium salt (PFUnDA-Na)	60871-96-7
	Potassium perfluoroundecanoate (PFUnDA-K)	30377-53-8
	Calcium perfluoroundecanoate (PFUnDA-Ca)	97163-17-2
PFDoDA, its salts	Perfluorododecanoic acid (PFDoDA)	307-55-1
	Ammonium perfluorododecanoate (APFDoDA)	3793-74-6
	Sodium perfluorododecanoate (PFDoDA-Na)	60872-01-7
PFTrDA, its salts	Pentacosafluorotridecanoic acid (PFTrDA)	72629-94-8
	Ammonium perfluorotridecanoate (PFTrDA-NH ₄)	4288-72-6
PFNS, its salts	Perfluorononane sulfonic acid (PFNS)	68259-12-1
	Sodium perfluoro-1-nonanesulfonate (PFNS-Na*)	98789-57-2
	Ammonium nonadecafluorononanesulphonate (PFNS-NH4)	17202-41-4
	Potassium perfluorononanesulfonate (PFNS-K*)	29359-39-5
PFDoDS, its salts	Perfluorododecane sulfonic acid (PFDoDS)	79780-39-5
	Sodium perfluoro-1-dodecanesulfonate (PFDoDS-Na*)	1260224-54-1
PFTrDS, its salts	Perfluorotridecane sulfonic acid (PFTrDS)	791563-89-8
	Sodium perfluoro-1-tridecanesulfonate (PFTrDS-Na*)□	174675-49-1
PFDS, its salts	Perfluorodecane sulfonate (PFDS)	335-77-3
	Perfluorodecanesulfonate Na-salt (PFDS-Na)	2806-15-7
	Perfluorodecanesulfonate K-salt (PFDS-K)	2806-16-8
	Perfluoroaliphatic dean-sulfonate salt of NH4 (PFDS-NH ₄)	67906-42-7

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Group Name	Substance Name	CAS No.
H2PFDA, its salts	2H,2H-Perfluorodecane acid (H2PFDA)	27854-31-5
	Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	882489-14-7
HFPO-DA, its salts & derivatives	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacide (HFPO-DA)	13252-13-6
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, K- salts	67118-55-2
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, ammonium salts	62037-80-3
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, its acyl halides	2062-98-8
4:2 FTS, its salts	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4
	1H,1H,2H,2H-perfluorohexane sulfonate acid sodiumsalt	27619-93-8
4HPFUnA, its salts	2H,2H,3H,3H-Perfluoroundecanoic Acid (4HPFUnA)	34598-33-9
	Potassium 2H,2H,3H,3H- Perfluoroundecanoate(H4PFUnA-K)	83310-58-1
PFPeS, its salts	Perfluoropentane sulfonic acid (PFPeS)	2706-91-4
,	Sodium perfluoro-1-pentanesulfonate (PFPeS-Na*)	630402-22-1
	Potassium perfluoropentane-1-sulphonate (PFPeS-K)	3872-25-1
	Ammonium perfluoropentanesulfonate (PFPeS-NH ₄ *)	68259-09-6
8:2diPAP, its salts	Bis(1H,1H,2H,2H-Perfluorodecyl) phosphate (8:2diPAP)	678-41-1
,	Sodium bis(1H,1H,2H,2H-perfluorodecyl) phosphate(8:2diPAP-Na)	114519-85-6
11H-PFUnDA, its salts	potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11- icosafluoroundecanoate (11H-PFUnDA-K)	307-71-1
	Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosafluoroundecanoate (11H-PFUnDA-NH ₄)	5081-02-7

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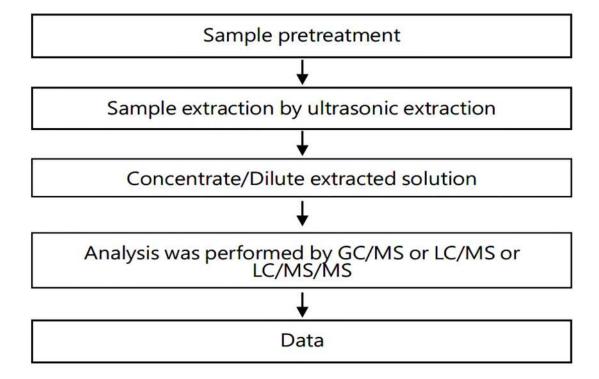
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Analytical flow chart - PFAS (including PFOA/PFOS/its related compound, etc.)



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* End of Report *

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