



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 1 of 23

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

SGS File No. : AYAA26-08159
Product Name : ~~THERMALPAPER~~
Item No./Part No. : N/A
Received Date : 2026. 02. 10
Test Period : 2026. 02. 10 to 2026. 02. 20
Test Results : For further details, please refer to following page(s)

Monet Jeong

Technical Manager / SGS Korea Co., Ltd

This test report is limited to the samples and sample names provided by the client and does not guarantee the quality of all the client's products. It shall not be used for public relation, advertisement, lawsuit and shall not be used by excepts from it. This test report can be checked through the <http://rohs.kr.sgs.com/checkreport/main>. This test report is not related to KS Q ISO/IEC 17025 and Korea Laboratory Accreditation Scheme.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its presentation only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 2 of 23

SGS File No. : AYAA26-08159.001

Product Name : THERMAL PAPER

Item No./Part No. : N/A

Materials : N/A

PFOS, its salts and related compounds

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
1	Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
2	N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)	4151-50-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
3	N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)	31506-32-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
4	2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (N-EtFOSE)	1691-99-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
5	2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (N-MeFOSE)	24448-09-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
6	Perfluorooctane sulfonamide (PFOSA)	754-91-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
7	Perfluorooctane sulfonamidoacetic Acid (FOSAA)	2806-24-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
8	N-Methylperfluoro-1-octanesulfonamidoacetic Acid (N-MeFOSAA)	2355-31-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
9	N-Ethylperfluorooctane sulfonamidoacetic Acid (N-EtFOSAA)	2991-50-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
10	2-(N-ethylperfluorooctanesulfamido)ethyl acrylate (EtFOSAC)	423-82-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

PFOA, its salts

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
11	Perfluorooctanoic acid (PFOA)	335-67-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.

PFOA-related compounds

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
12	Perfluoro-1-iodooctane (PFOI)	507-63-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
13	3-Perfluoroheptyl propanoic acid (7:3 FTCA)	812-70-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
14	2H-Perfluoro-2-decenoic acid (8:2 FTUCA)	70887-84-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
15	8:8 Perfluorophosphinic acid (8:8 PFPI)	40143-79-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
16/17	Methyl perfluorooctanoate (Me-PFOA); Ethyl perfluorooctanoate (Et-PFOA)	376-27-2 /3108-24-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <<http://www.sgs.com/en/Terms-and-Conditions.aspx>> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client in a transaction for exercising all their rights.



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 3 of 23

SGS File No. : AYAA26-08159.001

Product Name : THERMAL PAPER

Item No./Part No. : N/A

Materials : N/A

C9-C14 PFCA, its salts

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
18	Perfluorononane Acid (PFNA)	375-95-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
19	Perfluorodecane Acid (PFDA)	335-76-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
20	Perfluoroundecanoic Acid (PFUnDA)	2058-94-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
21	Perfluorododecanoic Acid (PFDoDA)	307-55-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
22	Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
23	Perfluorotetradecanoic Acid (PFTDA)	376-06-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.
24	Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.

C9-C14 PFCA-related substances

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
25	Perfluorodecane sulfonic Acid (PFDS)	335-77-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
26	1H,1H,2H,2H-Perfluoro-1-dodecaol (10:2 FTOH)	865-86-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
27	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
28	1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS)	120226-60-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
29	1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
30	1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
31	Perfluorononane sulfonic acid (PFNS)	68259-12-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
32	Perfluoroundecane sulfonic acid (PFUnDS)	749786-16-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
33	Perfluorododecane sulfonic acid (PFDoDS)	79780-39-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
34	Perfluorotridecane sulfonic acid (PFTrDS)	791563-89-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-a-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to the Client in relation to a transaction from exercising all their



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 4 of 23

SGS File No. : AYAA26-08159.001

Product Name : THERMAL PAPER

Item No./Part No. : N/A

Materials : N/A

C9-C14 PFCA-related substances

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
35	10:2 Fluorotelomerphosphatediester (10:2 diPAP)	1895-26-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
36	Perfluorodecyl iodide (PFDI)	423-62-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
37	Perfluorododecyl iodide (PFDoDI)	307-60-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
38	2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
39	2-Perfluorodecyl ethanoic acid (10:2 FTCA)	53826-13-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
40	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
41	2H,2H Perfluorodecane Acid (8:2 FTCA)	27854-31-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
42	1H,1H,2H,2H-Perfluorodecan-1-ol (8:2 FTOH)	678-39-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
43	1-Iodo-1H,1H,2H,2H-perfluorodecane (8:2 FTI)	2043-53-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
44	1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTSi(OC2H5)3)	101947-16-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
45	bis(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl) hydrogen phosphate (8:2 diPAP)	678-41-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
46	2H,2H,3H,3H-Perfluoroundecanoic Acid (8:3 FTCA)	34598-33-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
47	1H,1H,2H-Heptafluorodecyl-1-decene (PFDE)	21652-58-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
48/49	1H,1H,2H,2H-Perfluorodecyltrichlorosilane (8:2 FTSiCl3)/1H,1H,2H,2H-Perfluorodecyltrimethoxysilane (8:2 FTSi(OCH3)3)	78560-44-8 / 83048-65-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
50	8:2 Fluorotelomer phosphate monoester (8:2 monoPAP)	57678-03-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
51	1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
52	1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
53	1H,1H,2H,2H-perfluorododecyl acetate (10:2 FTOAc)	37858-05-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights.



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 5 of 23

SGS File No. : AYAA26-08159.001
Product Name : THERMAL PAPER
Item No./Part No. : N/A
Materials : N/A

C9-C14 PFCA-related substances

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
54	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
55	1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
56	1H,1H,2H,2H-perfluorodecyl acetate (8:2 FTOAc)	37858-04-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

PFHxS, its salts

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
57	Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.

PFHxS-related compounds

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
58	N-Methylperfluoro-1-hexanesulfonamide (N-MeFHxSA)	68259-15-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
59	Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
60	N-[3-(dimethylamino)propyl] tridecafluorohexanesulphonamide (N-AP-FHxSA)	50598-28-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
61	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2-hydroxyethyl)-N-methyl-(MeFHxSE)	68555-75-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
62	Glycine, N-ethyl-N-[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]-(EtFHxSAA)	68957-32-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
63	2-[methyl[(tridecafluorohexyl) sulphonyl]amino]ethyl acrylate)) (N-MeFHSEA)	67584-57-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
64	2-Propenoic acid, 2-methyl-, 2-[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester (EtFHxSEMA)	67906-70-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
65	2-Propenoic acid, 2-methyl-, 2-[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester (MeFHxSEMA)	67584-61-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

PFHxA, its salts

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
66	Perfluorohexane Acid (PFHxA)	307-24-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	10	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-a-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the applicable law. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 6 of 23

SGS File No. : AYAA26-08159.001
Product Name : THERMAL PAPER
Item No./Part No. : N/A
Materials : N/A

PFHxA-related compounds

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
67	1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
68	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodooctane (6:2 FTI)	2043-57-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
69	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
70	1H,1H,2H,2H-Perfluorooctyltriethoxysilane (6:2 FTSi(OC2H5)3)	51851-37-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
71/72	1H,1H,2H,2H-Perfluorooctyltrichlorosilane (6:2 FTSiCl3)/1H,1H,2H,2H-Perfluorooctyltrimethoxysilane (6:2 FTSi(OCH3)3)	78560-45-9/85857-16-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
73	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-6-iodohexane (PFHx-I)	355-43-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
74	1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodononane	38550-34-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
75	n-[3-(dimethylamino)propyl]-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro octanesulphonamide n-oxide	80475-32-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
76	thiocyanic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester	26650-09-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
77	6:2 Fluorotelomer phosphate monoester (6:2 monoPAP)	57678-01-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
78	2h,2h,3h,3h-perfluorononanoic acid (6:3 FTCA)	27854-30-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
79	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-thiol (6:2 FTSH)	34451-26-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
80	1H,1H,2H,2H-Perfluorooctyldimethylchlorosilane (6:2 FTSiMe2Cl)	102488-47-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
81	1H,1H-Tridecafluoro-1-iodoheptane (6:1 FTI)	212563-43-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
82	4,4,5,5,6,6,7,7,8,8,9,9,9-Tridecafluorononyl iodide (6:3 FTI)	89889-20-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
83	Perfluorohexyl ethylphosphonic acid (6:2 FTPA)	252237-40-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
84	1-hexanol, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro- (5:1 FTOH)	423-46-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
85	2,2,3,3,4,4,5,5,6,6,7,7,7-tridecafluoroheptan-1-ol (6:1 FTOH)	375-82-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction. Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 7 of 23

SGS File No. : AYAA26-08159.001

Product Name : THERMAL PAPER

Item No./Part No. : N/A

Materials : N/A

PFHxA-related compounds

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
86	4,4,5,5,6,6,7,7,8,8,9,9-tridecafluorononanol (6:3 FTOH)	80806-68-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
87	3,3,4,4,5,5,6,6,7,7,7-undecafluoro-2-heptanol (5:2sFTOH)	914637-05-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
88	1-(perfluorohexyl)octane (F6H8)	133331-77-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
89	1H,1H-Tridecafluoroheptylamine (6:1 FTNH ₂)	423-49-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
90	2H-Perfluoro-2-octenoic acid (6:2 FTUCA)	70887-88-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
91	6:6 Perfluorophosphinic acid (6:6 PFPI)	40143-77-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
92	6:8 Perfluorophosphinic acid (6:8 PFPI)	610800-34-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	100	N.D.
93	1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
94	1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

Other PFAS

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
95	Perfluorobutane Acid (PFBA)	375-22-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
96	Perfluorobutanesulfonic acid (PFBS)	375-73-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
97	Perfluoropentane Acid (PFPeA)	2706-90-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
98	Perfluoroheptane Acid (PFHpA)	375-85-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
99	Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
100	7H-Dodecafluoroheptane Acid (HPFHpA)	1546-95-8	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
101	1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
102	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides (HFPO-DA)	13252-13-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. The Company's responsibility is limited to the scope of the Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 8 of 23

SGS File No. : AYAA26-08159.001

Product Name : THERMAL PAPER

Item No./Part No. : N/A

Materials : N/A

Other PFAS

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
103	1H, 1H, 2H, 2H-Perfluorohexanesulfonic Acid (4:2 FTS)	757124-72-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
104	Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
105	2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
106	3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
107	Hexadecanoic acid, hentriacontafuoro-(PFHxDA)	67905-19-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
108	Octadecanoic acid, pentatriacontafuoro-(PFODA)	16517-11-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
109	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
110	Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
111	Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
112	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
113	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
114	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
115	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	113507-82-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
116	3-Perfluoropropyl propanoic acid (3:3 FTCA)	356-02-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
117	Perfluoropentadecanoic Acid(PFPeDA)	141074-63-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
118	Perfluorobutane sulfon amides (PFBSA)	30334-69-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
119	1,1,2,2,3,3,4,4,4-Nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulfonamide (N-MeFBSE)	34454-97-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
120	11H-Perfluoroundecanoic acid (11H-PFUnDA)	1765-48-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 9 of 23

SGS File No. : AYAA26-08159.001
Product Name : THERMAL PAPER
Item No./Part No. : N/A
Materials : N/A

Other PFAS

No.	Test Items	CAS No.	Unit	Test Method	MDL	Results
121	Pentafluoropropionic acid (PFPrA)	422-64-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
122	Hexafluoropropylene oxide trimer acid (HFPO-TA)	13252-14-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
123	Perfluoroethane sulfonic acid (PFEtS)	354-88-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
124	6:2 Fluorotelomer phosphate diester (6:2 diPAP)	57677-95-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
125	Bis(trifluoromethane)sulfonimide (TFSI)	82113-65-3	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
126	Trifluoromethane sulfonic acid (TFMS)	1493-13-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
127	Perfluoropropate sulfonic acid (PFPrS)	423-41-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
128	1-perfluoroheptyl ethanol (7:2 secondary) (7:2sFTOH)	24015-83-6	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
129	4:2 Fluorotelomer iodide (4:2 FTI)	2043-55-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
130	Perfluorooctylphosphic acid (PFOPA)	40143-78-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
131	1H,1H-Perfluorooctylamine (7:1 FTNH ₂)	307-29-9	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
132	N-methylperfluoro-1-butanefulfonamide (MeFBSA)	68298-12-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
133	n-(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl)iidoacetamide (TDFNA)	852527-50-5	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
134	Trifluoroacetic acid (TFA)	76-05-1	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	1,000	N.D.
135	1H,1H,2H,2H-Nonfluorohexyl acrylate (4:2 FTA)	52591-27-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
136	1H,1H,2H,2H-Perfluorohexyl methacrylate (4:2 FTMA)	1799-84-4	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
137	Perfluoroheptanamide (PFHpA-NH ₂)	2358-22-7	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
138	Perfluorobutyramide (PFBA-NH ₂)	662-50-0	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.
139	1H,1H,2H,2H-Perfluorodecylmethylchlorosilane (8:2 FTSiMeCl ₂)	3102-79-2	µg/kg	With reference to EN 17681-1:2025, HPLC-MS-MS/GC-MS	200	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized



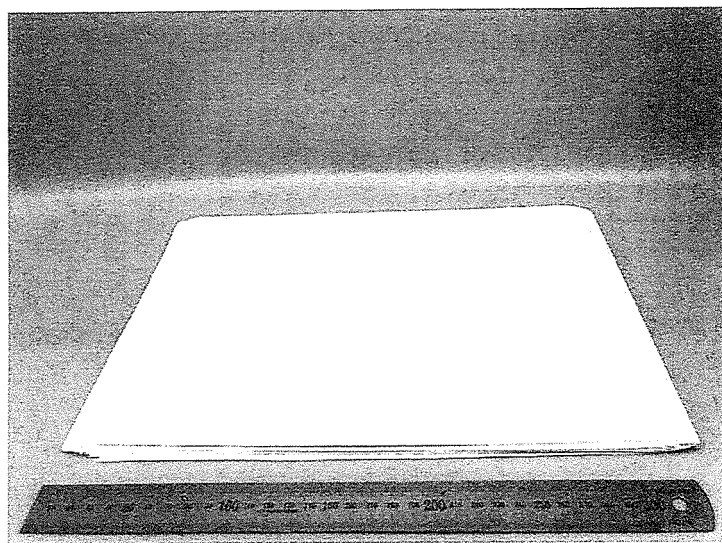
Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 10 of 23

- NOTE:
- (1) N.D. = Not Detected (<MDL)
 - (2) mg/kg = ppm, ug/kg = ppb, mg/L = ppm
 - (3) MDL = Method Detection Limit
 - (4) Some PFAS are classified as both PFOA-related substances and C9-C14 PFCA-related substances.
 - (5) 6:8 Perfluorophosphinic acid (6:8 PFPI) is classified as both PFOA-related substance and PFHxA-related substance.
 - (6) As the extraction is performed with methanol, EtPFOA will convert to MePFOA. Thus, the sum of both is considered and calculated. 8:2 FTSiCl₃ cannot be analytically distinguished from 8:2 FTSi(OCH₃)₃ with current method. Thus, the sum of both is considered and calculated. The same applies to 6:2 FTSiCl₃ and 6:2 FTSi(OCH₃)₃.
 - (7) Salts or derivatives of the substance are listed in Appendix 1.
 - (8) The Possible sources of the substances are listed in Appendix 2.
 - (9) Some PFAS are likely hydrolyzed to release other concerned PFAS listed in Appendix 2 and contribute to the total amount of the related PFAS if present in the sample, when treated with strong alkaline solvents. Therefore, the extractable content of these PFAS in the sample is determined by the methanol extraction described in Annex E.

Picture of Sample as Received:



AYAA26-08159.001



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 12 of 23

Appendix 1 - List of PFAS its salts & derivatives

Note: The listed salts/derivatives are analyzed through their corresponding PFAS.

No.	Substances	CAS No.	No.	Substances	CAS No.
PFOA, its salts & derivatives					
1	Sodium perfluorooctanoate (PFOA-Na)	335-95-5	2	Pentadecafluorooctanoate (anion)	45285-51-6
3	Potassium perfluorooctanoate (PFOA-K)	2395-00-8	4	Perfluorooctanoic Anhydride	33496-48-9
5	Lithium perfluorooctanoate (PFOA-Li)	17125-58-5	6	N,N,N-Triethylethanaminium perfluorooctanoate	98241-25-9
7	Silver perfluorooctanoate (PFOA-Ag)	335-93-3	8	Perfluorooctanoate N,N,N-Trimethylmethanaminium	32609-65-7
9	Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	10	Tetrapropylammonium perfluorooctanoate	277749-00-5
11	Ammonium perfluorooctanoate (APFO)	3825-26-1	12	Potassium pentadecafluorooctanoate-water (1/1/2) _ (PFOA-K(H ₂ O) ₂)	98065-31-7
13	Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6	14	Perfluorooctanoic acid compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6
15	Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9	16	Pentadecafluorooctanoic acid-pyridine (1/1) (PFOA-C ₅ H ₅ N)	95658-47-2
17	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium (PFOA-Cr ³⁺)	68141-02-6	18	Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA-C ₁₀ H ₁₄ N ₂)	1514-68-7
19	Pentadecafluorooctanoic acid-piperazine (PFOA-NH(C ₄ H ₁₀ N))	423-52-9	20	N,N,N-Trimethyloctan-1-aminium pentadecafluorooctanoate	927835-01-6
8:2 FTCA, its salts					
21	Tetrabutylphosphonium 2H,2H-Perfluorodecanoate (8:2 FTCA-P(C ₄ H ₉) ₄)	882489-14-7			
PFOS, its salts & derivatives					
22	Potassium perfluorooctane sulfonate (PFOS-K)	2795-39-3	23	TetrabutylAmmonium perfluorooctanesulfonate (PFOS-N(C ₄ H ₉) ₄)	111873-33-7
24	Sodium perfluorooctane sulfonate (PFOS-Na)	4021-47-0	25	Perfluorooctanesulfonate	45298-90-6
26	Lithium perfluorooctane sulfonate (PFOS-Li)	29457-72-5	27	Triethylammonium perfluorooctane sulfonate (PFOS-N(C ₂ H ₅) ₃)	54439-46-2
28	Ammonium perfluorooctane sulfonate (PFOS-NH ₄)	29081-56-9	29	Tetramethylammonium perfluorooctane sulfonate (PFOS-N(CH ₃) ₄)	56773-44-5
30	Perfluorooctane sulfonate diethanolamine salt (PFOS-NH ₂ (C ₂ H ₄ OH) ₂)	70225-14-8	31	N,N,N-Tripropylpentan-1-aminium heptadecafluorooctane-1-sulfonate (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁))	56773-56-9
32	Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄) / PFOS-TEA	56773-42-3	33	N,N-Dibutyl-N-methylbutan-1-aminium heptadecafluorooctane-1-sulfonate (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
34	Didecyl dimethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8	35	Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, salt with perfluoro-1-octanesulfonic acid (1:1)	213740-80-8
36	Magnesium bis(heptadecafluoro octanesulphonate) (PFOS-Mg)	91036-71-4	37	Diphenyl(2,4,6-trimethylphenyl)sulfonium perfluoro-1-octanesulfonate	258341-99-0
38	Perfluoro-1-octanesulfonyl fluoride (PFOS-F)	307-35-7	39	1-Hexadecylpyridinium perfluoro-1-octanesulfonate	334529-63-4
40	Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate	71463-74-6	41	N,N,N-Triethyldecan-1-aminium heptadecafluorooctane-1-sulfonate	773895-92-4
42	Perfluorooctanesulfonic acid diethylamine salt (PFOS-C ₄ H ₁₁ N)	2205029-08-7	43	Tetrabutylphosphonium perfluorooctane sulfonate	2185049-59-4
44	Perfluorooctane sulfonic anhydride (PFOSAN)	423-92-7	45	Heptyldimethyl(2-[(2-methylprop-2-enoyloxy)ethyl]azanum heptadecafluorooctane-1-sulfonate (PFOS-C ₁₅ H ₃₀ NO ₂)	1203998-97-3

**Test Report** No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 13 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
PFNA, its salts					
46	Sodium heptadecafluorononanoate (PFNA-Na)	21049-39-8	47	Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-ethylethanamine (1:1) (PFNA-N(C ₄ H ₁₁))	77032-27-0
48	Perfluorononanoate ammonium salt (PFNA-NH ₄)	4149-60-4	49	Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-methylmethanamine (1:1) (PFNA-N(C ₂ H ₇))	77032-24-7
50	Potassium perfluorononanoate (PFNA-K)	21049-38-7	51	Nonanoic acid, heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (9CI) (PFNA-N(C ₆ H ₁₅))	327176-80-7
52	Lithium perfluorononanoate (PFNA-Li)	60871-92-3	53	Nonanoic acid, heptadecafluoro-, compd. with piperidine (1:1) (9CI) (PFNA-N(C ₅ H ₁₁))	95682-66-9
54	Silver perfluorononanoate (PFNA-Ag)	7358-16-9	55	Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with benzenamine (1:1) (PFNA-N(C ₆ H ₇))	95682-67-0
56	Methanaminium perfluorononanoate (PFNA-NH ₃ (CH ₃))	77032-23-6	57	Nonanoic acid, heptadecafluoro-, compd. with cyclohexanamine (1:1) (9CI) (PFNA-N(C ₆ H ₁₃))	328531-06-2
58	4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium heptadecafluorononanoate (PFNA-C ₁₁ H ₁₂ N ₄ O ₃ S)	298703-33-0	59	Perfluorononanoate (anion)	72007-68-2
60	Perfluorononanoic anhydride (PFNAA)	228407-54-3			
PFDA, its salts					
61	Sodium nonadecafluorodecanoate (PFDA-Na)	3830-45-3	62	Silver perfluorodecanoate (PFDA-Ag)	5784-82-7
63	Perfluorodecanoate ammonium salt (PFDA-NH ₄)	3108-42-7	64	Lithium perfluorodecanoate (PFDA-Li)	84743-32-8
65	Potassium perfluorodecanoate (PFDA-K)	51604-85-4	66	Perfluorodecanoate (anion)	73829-36-4
67	Perfluorodecanoic anhydride (PFDA)	942199-24-8			
PFUnDA, its salts					
68	Sodium perfluoroundecanoate (PFUnDA-Na)	60871-96-7	69	Potassium perfluoroundecanoate (PFUnDA-K)	30377-53-8
70	Ammonium perfluoroundecanoate (PFUnDA-NH ₄)	4234-23-5	71	Calcium perfluoroundecanoate (PFUnDA-Ca)	97163-17-2
72	Perfluoroundecanoate (anion)	196859-54-8			
PFDODA, its salts					
73	Ammonium tricosafafluorododecanoate (PFDODA-NH ₄)	3793-74-6	74	Perfluorododecanoate (anion)	171978-95-3
PFDS, its salts					
75	Sodium perfluorodecanesulfonate (PFDS-Na)	2806-15-7	76	Perfluorodecanesulfonic acid ammonium salt (PFDS-NH ₄)	67906-42-7
77	Potassium perfluorodecanesulfonate (PFDS-K)	2806-16-8	78	Perfluorodecane sulfonate (anion)	126105-34-8
79	Perfluorodecane sulfonic anhydride (PFDSA)	51667-62-0			
8:3 FTCA, its salts					
80	Potassium 2H,2H,3H,3H-Perfluoroundecanoate (8:3 FTCA-K)	83310-58-1	81	2H,2H,3H,3H-Perfluoroundecanoate (8:3 FTCA-Li)	67304-23-8

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 14 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
PFHxS, its salts & derivatives					
82	1-Hexanesulfonic acid, 1,1,2,2,3,3, 4,4,5,5,6,6,6-tridecafluoro-, sodium salt (PFHxS-Na)	82382-12-5	83	Bis(4-tert-butylphenyl)iodanium tridecafluorohexane-1-sulfonate	213740-81-9
84	Potassium perfluorohexane-1-sulphonate (PFHxS-K)	3871-99-6	85	Bis(4-methylphenyl)(phenyl)sulfanium tridecafluorohexane-1-sulfonate	341548-85-4
86	Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9	87	Sulfonium, (thiodi-4,1-phenylene)bis(diphenyl)-, salt with perfluorohexanesulfonic acid (1:2)	421555-73-9
88	Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	68259-08-5	89	Perfluorohexanesulfonic acid, Gallium(3+) salt (3:1) (PFHxS-Ga)	341035-71-0
90	Benzyltriphenylphosphonium tridecafluorohexane-1-sulfonate (PFHxS-BTPP)	1000597-52-3	91	Perfluorohexanesulfonic acid, Scandium(3+) salt (3:1) (PFHxS-Sc)	350836-93-0
92	N,N,N-Tributylbutan-1-aminium tridecafluorohexane-1-sulfonate	108427-54-9	93	Perfluorohexanesulfonic acid, Neodymium(3+) salt (3:1) (PFHxS-Nd)	41184-65-0
94	Tetraethylammonium perfluorohexane sulfonate	108427-55-0	95	Perfluorohexanesulfonic acid, Yttrium(3+) salt (3:1) (PFHxS-Y)	41242-12-0
96	Tridecafluorohexane-1-sulfonic acid-pyrrolidine	1187817-57-7	97	Cesium perfluorohexanesulfonate (PFHxS-Cs)	92011-17-1
98	4-[(4-(Diethylamino)phenyl)[4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-diethylcyclohexa-2,5-dien-1-iminium	1310480-24-0	99	Perfluorohexanesulfonic acid, Zinc salt (PFHxS-Zn)	70136-72-0
100	4-[(4-(Dimethylamino)phenyl)[4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate	1310480-27-3	101	Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, perfluorohexanesulfonate (1:1)	421555-74-0
102	4-[(4-(Dimethylamino)phenyl)[4-(phenylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate	1310480-28-4	103	Tris(4-tert-butylphenyl)sulfanium tridecafluorohexane-1-sulfonate	425670-70-8
104	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	1329995-45-0	105	Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1)	70225-16-0
106	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	1329995-69-8	107	Triethylammonium perfluorohexane sulfonate	72033-41-1
108	Triphenylsulfanium tridecafluorohexane-1-sulfonate (TPS-PFHxS)	144116-10-9	109	Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with perfluorohexanesulfonic acid (1:1)	866621-50-3
110	1-(Carboxymethyl)-4-(2-[4-(2,2-diphenylethenyl)phenyl]-1H,2H,3H,3aH,4H,8bH-cyclopenta[b]indol-7-yl)ethenylquinolin-1-ium tridecafluorohexane-1-sulfonate	1462414-59-0	111	(4-Methylphenyl)diphenylsulfanium tridecafluorohexane-1-sulfonate	910606-39-2
112	Diphenyliodonium tridecafluorohexane-1-sulfonate	153443-35-7	113	{4-[(2-Methylprop-2-enoyl)oxy]phenyl}diphenylsulfanium tridecafluorohexane-1-sulfonate	911027-68-4
114	Tetramethylammonium perfluorohexane sulfonate (PFHxS-TMA)	189274-31-5	115	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
116	Tert-butylazanium;1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexane-1-sulfonate	202189-84-2	117	Perfluorohexylsulfonyl fluoride (PFHxS-F)	423-50-7
118	Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.1 ^{3,7}]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.1 ^{3,7}]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate	911027-69-5	119	Perfluorohexylsulfonyl chloride (PFHxS-Cl)	55591-23-6
120	Tetrabutylphosphonium perfluorohexane sulfonate	2310194-12-6	121	Perfluorohexane sulfonate (anion)	108427-53-8

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> or, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 15 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
PFHxA, its salts & derivatives					
122	Ammonium perfluorohexanoate (APFHx)	21615-47-4	123	Lithium perfluorohexanoate (PFHx-A-Li)	90430-61-8
124	Sodium perfluorohexanoate (PFHx-A-Na)	2923-26-4	125	Perfluorohexanoyl fluoride (PFHx-A-F)	355-38-4
126	Potassium perfluorohexanoate (PFHx-A-K)	3109-94-2	127	Hexanoic acid, undecafluoro-, compd. with piperazine (2:1) (8C1,9C1)	423-47-2
128	Silver perfluorohexanoate (PFHx-A-Ag)	336-02-7	129	Perfluorohexanoic anhydride	308-13-4
130	Perfluorohexanoyl chloride (PFHx-A-Cl)	335-53-5	131	Perfluorohexanoate (anion)	92612-52-7
132	1-phenylpiperazine; 2,2,3,3,4,4,5,5,6,6,6-undecafluorohexanoic acid (PFHx-A-C10H14N2)	985-60-4	133	Undecafluorohexanoic acid-hexan-1-amine (1/1) (PFHx-A-C6H15N)	565225-91-4
PFBA, its salts					
134	Sodium perfluorobutanoate (PFBA-Na)	2218-54-4	135	Silver perfluorobutanoate (PFBA-Ag)	3794-64-7
136	Potassium heptafluorobutanoate (PFBA-K)	2966-54-3	137	Lithium perfluorobutanoate (PFBA-Li)	4146-76-3
138	Ammonium perfluorobutanoate (PFBA-NH ₄)	10495-86-0	139	Butanoic acid, heptafluoro-, compd. with piperazine (2:1) (9C1)	375-04-2
140	Perfluorobutanoate (anion)	45048-62-2			
PFBS, its salts & derivatives					
141	Potassium perfluorobutanesulfonate (PFBS-K)	29420-49-3	142	Sulfonium, (4-cyclohexylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	425670-64-0
143	Perfluorobutane sulfonic acid hydrate (PFBS-H ₂ O)	59933-66-3	144	Thiophenium, tetrahydro-1-(1-methyl-1H-indol-3-yl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	867373-18-0
145	Sodium perfluorobutanesulfonate (PFBS-Na)	60453-92-1	146	Pyridinium, 1-ethyl-3-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	1015420-87-7
147	Lithium perfluorobutanesulfonate (PFBS-Li)	131651-65-5	148	1H-imidazolium, 1-methyl-3-octyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	905972-83-0
149	Ammonium perfluorobutanesulfonate (PFBS-NH ₄)	68259-10-9	150	1H-imidazolium, 3-hexyl-1-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	1001557-05-6
151	Magnesium perfluorobutanesulfonate (PFBS-Mg)	507453-86-3	152	2-Propanaminium, N,N-dimethyl-N-(1-methylethyl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	374571-81-0
153	Triphenylsulfonium perfluorobutanesulfonate (TPS-PFBS)	144317-44-2	154	Sulfonium, [4-[2-(1,1-dimethylethoxy)-2-oxoethoxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	857285-80-4
155	Tetrabutyl-phosphonium perfluorobutanesulfonate	220689-12-3	156	1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	124472-66-8
157	N,N,N,-Triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate	25628-08-4	158	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, zinc salt (2:1)	502457-69-4
159	N-Morpholinium perfluorobutanesulfonate	503155-89-3	160	1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	56773-55-8
161	Bis(4-tert-butylphenyl)iodonium perfluoro-1-butanefluorobutane-1-sulfonate	194999-85-4	162	Perfluorobutanesulfonic acid tetramethylammonium salt (PFBS-N(CH ₃) ₄)	25628-17-5
163	1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonic acid, compound with 2,2'-iminodiethanol (1:1)	70225-18-2	164	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, 1,1'-anhydride	36913-91-4
165	Perfluorobutanesulfonyl fluoride (PFBS-F)	375-72-4	166	Perfluorobutane sulfonate (anion)	45187-15-3
167	Perfluorobutanesulphonyl chloride (PFBS-Cl)	2991-84-6	168	1-(4-butoxy-1-naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate	468-770-4
169	Sulfonium, dimethylphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanefluorobutane-1-sulfonate (1:1)	220133-51-7	170	Triethylammonium perfluorobutane sulfonate	182059-38-7

Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 16 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
171	Thiophenium, 1-(4-butoxy-1-naphthalenyl)tetrahydro-, 1,1,2,2,3,3,4,4,4-nonafuoro-1-butanefulfonate (1:1)	209482-18-8	172	N-(2-Hydroxyethyl)-N,N-dimethyl-1-octanaminium perfluoro-1-butanefulfonate (1:1)	334529-55-4
173	1-Butanaminium, N,N,N-tributyl-, 1,1,2,2,3,3,4,4,4-nonafuoro-1-butanefulfonate (1:1) Tetrabutylammonium nonafuorobutanefulfonate	108427-52-7	174	1-Hexadecylpyridinium perfluoro-1-butanefulfonate	334529-62-3
175	Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,4-nonafuoro-1-butanefulfonate (1:1)	194999-82-1	176	1-Butylpyridinium perfluoro-1-butanefulfonate	334529-64-5
177	Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,4-nonafuoro-1-butanefulfonate (1:1)	241806-75-7	178	N-Methyl-N,N-dioctyl-1-octanaminium perfluoro-1-butanefulfonate	495417-51-1
179	Sulfonium, tris(4-methylphenyl)-, salt with perfluoro-1-butanefulfonic acid (1:1)	722538-68-3			
PFPeA, its salts					
180	Sodium perfluoropentanoate (PFPeA-Na)	2708-89-0	181	Lithium perfluoropentanoate (PFPeA-Li)	198482-22-3
182	Potassium perfluoropentanoate (PFPeA-K)	336-23-2	183	Silver perfluoropentanoate (PFPeA-Ag)	2795-30-4
184	Ammonium perfluoropentanoate (PFPeA-NH ₄)	68259-11-0	185	Perfluoropentanoate	45167-47-3
186	Perfluoropentanoic anhydride (PFPeAA)	308-28-1	187	Nonafuoropentanoic acid - 1-benzylthiourea (1:1) (PFPeA-C ₈ H ₁₀ N ₂ S)	64808-55-5
PFHpA, its salts					
188	Sodium perfluoroheptanoate (PFHpA-Na)	20109-59-5	189	Caesium perfluoroheptanoate (PFHpA-Cs)	171198-24-6
190	Potassium perfluoroheptanoate (PFHpA-K)	21049-36-5	191	Silver perfluoroheptanoate (PFHpA-Ag)	424-05-5
192	Ammonium perfluoroheptanoate (PFHpA-NH ₄)	6130-43-4	193	Lithium perfluoroheptanoate (PFHpA-Li)	60871-90-1
194	Perfluoroheptanoate (anion)	120885-29-2			
PFHpS, its salts					
195	Sodium perfluoroheptanesulfonate (PFHpS-Na)	21934-50-9	196	1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-pentadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)	70225-15-9
197	Potassium perfluoroheptanesulfonate (PFHpS-K)	60270-55-5	198	Perfluoroheptane sulfonate	146689-46-5
199	Ammonium perfluoroheptanesulfonate (PFHpS-NH ₄)	68259-07-4	200	Triethylammonium perfluoroheptane sulfonate	72033-40-0
201	Lithium perfluoroheptanesulfonate (PFHpS-Li)	117806-54-9	202	Tetraethylammonium perfluoroheptane sulfonate	439863-97-5
203	Perfluoroheptane sulfonic anhydride (PFHpSA)	140429-92-1			
HFPO-DA, its salts & derivatives					
204	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)- (isomer)	75579-39-4	205	Perfluoro(2-propoxypropanoate)	122499-17-6
206	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)- (isomer)	75579-40-7	207	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid-N-propylpropan-1-amine (1/1)	165951-17-7
208	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, ammonium salt (HFPO-DA-NH ₄)	62037-80-3	209	Triethylammonium perfluoro-2-propoxypropanoate	165951-18-8
210	Potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate (HFPO-DA-K)	67118-55-2	211	4-[(6-Methoxy-3-pyridazinyl)sulfonyl]anilinium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	298703-31-8
212	Sodium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	67963-75-1	213	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionyl fluoride (HFPO-DA-F)	2062-98-8
214	2,3,6-Triiodobenzoic acid (1-methyl-3-piperidyl)methyl ester compd. with perfluoro-2-(propoxy)propanoate (1:1) (HFPO-C ₁₄ H ₁₆ I ₃ N ₂ O ₂)	2412106-69-3			



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 17 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
PFPeS, its salts					
215	Sodium perfluoropentanesulfonate (PFPeS-Na)	630402-22-1	216	Bis(2-hydroxyethyl) ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate	70225-17-1
217	Potassium perfluoropentane-1-sulphonate (PFPeS-K)	3872-25-1	218	Undecafluoropentane-1-sulfonic acid lithium salt (PFPeS-Li)	1046864-81-6
219	Ammonium perfluoropentanesulfonate (PFPeS-NH ₄)	68259-09-6	220	Perfluoropentane sulfonate anion)	175905-36-9
221	Perfluoropentane sulfonic anhydride (PFPeSA)	161877-72-1	222	Triethylammonium perfluoropentane sulfonate	72033-42-2
PFNS, its salts					
223	Sodium perfluorononanesulfonate (PFNS-Na)	98789-57-2	224	Ammonium nonadecafluorononanesulphonate (PFNS-NH ₄)	17202-41-4
225	Potassium perfluorononanesulfonate (PFNS-K)	29359-39-5	226	Perfluorononane sulfonate (anion)	474511-07-4
PFUnDS, its salts					
227	Perfluoroundecanesulfonate (anion)	441296-91-9			
PFD oDS, its salts					
228	Sodium perfluorododecanesulfonate (PFD oDS-Na)	1260224-54-1	229	Potassium perfluorododecanesulfonate (PFD oDS-K)	85187-17-3
230	Perfluorododecane sulfonate (anion)	343629-43-6			
PFT rDS, its salts					
231	Sodium perfluorotridecanesulfonate (PFT rDS-Na)	174675-49-1			
8:2 diPAP, its salts					
232	Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2 diPAP-Na)	114519-85-6	233	Bis[2-(perfluorooctyl)ethyl] phosphate ammonium salt (8:2 diPAP-NH ₄)	93776-20-6
234	Bis(2-hydroxyethyl)ammonium bis((perfluorooctyl)ethyl) hydrogen phosphate	57677-97-1	235	8:2 Fluorotelomer phosphate diester ion (1-)	1411713-91-1
8:2 FTS, its salts					
236	Potassium 1H,1H,2H,2H-Perfluorododecane sulfonate (8:2 FTS-K)	438237-73-1	237	Sodium 1H,1H,2H,2H-Perfluorododecane sulfonate (8:2 FTS-Na)	27619-96-1
238	2-(Perfluorooctyl)ethane-1-sulfonate (8:2 FTS(anion))	481071-78-7	239	Ammonium 1H,1H,2H,2H-Perfluorododecane sulfonate (8:2 FTS-NH ₄)	149724-40-3
PFOSA, its salts					
240	Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9	241	Perfluorooctanesulfonamide Potassium salt (PFOSA-K)	76752-70-0
242	Perfluorooctanesulfonamide Sodium salt (PFOSA-Na)	76752-78-8	243	Perfluorooctanesulfonamide Ammonium salt (PFOSA-NH ₄)	76752-72-2
244	Heptafluorooctane-1-sulphonamide, compound with triethylamine (1:1) (PFOSA-C ₆ H ₁₅ N)	76752-82-4			
PFT rDA, its salts					
245	Ammonium perfluorotridecanoate (PFT rDA-NH ₄)	4288-72-6	246	Perfluorotridecanoate (anion)	862374-87-6
247	Sodium perfluorotridecanoate (PFT rDA-Na)	60872-01-7			
PFTDA, its salts					
248	Perfluorotetradecanoate (anion)	365971-87-5			

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from ~~exercising all their rights and obligations under the transaction documents. This document cannot be considered as a full and complete statement of the Company. Any unauthorized~~



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 18 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
11H-PFUnDA, its salts					
249	Potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosafuoroundecanoate (11H-PFUnDA-K)	307-71-1	250	Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosafuoroundecanoate (11H-PFUnDA-NH4)	5081-02-07
251	11-H-Perfluoroundecanoate (11H-PFUnDA(anion))	69681-37-4			
HPFHpA, its salts					
252	Sodium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-Na)	2264-25-7	253	Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-NH4)	376-34-1
254	7-H-Perfluoroheptanoate (HPFHpA(anion))	69681-35-2			
6:2 FTS, its salts					
255	6:2 Fluorotelomer sulfonate sodium salt (6:2 FTS-Na)	27619-94-9	256	6:2 Fluorotelomer sulfonate ammonium salt (6:2 FTS-NH4)	59587-39-2
257	6:2 Fluorotelomer sulfonate potassium salt (6:2 FTS-K)	59587-38-1	258	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
259	2-(Perfluorohexyl)ethane-1-sulfonate (6:2 FTS(anion))	425670-75-3			
4:2 FTS, its salts					
260	4:2 Fluorotelomer sulfonate (4:2 FTS(anion))	414911-30-1	261	1H,1H,2H,2H-perfluorohexane sulfonate acid sodium salt (4:2 FTS-Na)	27619-93-8
ADONA, its salts					
262	Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA-NH4)	958445-44-8	263	Sodium 4,8-dioxa-3H-perfluorononanoate (ADONA-Na)	2250081-67-3
9CI-PF3ONS, its salts					
264	Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	73606-19-6	265	Ammonium perfluoro-2-[(6-chlorohexyl)oxy]ethane-1-sulfonate	1383434-28-3
11CI-PF3OUs, its salts					
266	Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	83329-89-9			
PFPrA, its salts					
267	Sodium pentafluoropropionate (PFPrA-Na)	378-77-8	268	Potassium pentafluoropropionate (PFPrA-K)	378-76-7
269	Silver pentafluoropropionate (PFPrA-Ag)	509-09-1	270	Ammonium pentafluoropropionate (PFPrA-NH4)	2730-58-7
HFPO-TA, its salts & derivatives					
271	Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-[(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-, potassium salt (HFPO-TA-K)	67118-57-4	272	Propanoic acid, 2,3,3,3-tetrafluoro-2-[(1,1,2,3,3,3-hexafluoro-2-[(heptafluoropropoxy)propoxy]-, ammonium salt (HFPO-TA-NH4)	13043-05-5
273	Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid, sodium salt (HFPO-TA-Na)	67963-76-2	274	Perfluoro(2,5-dimethyl-3,6-dioxanonanoyl) fluoride (HFPO-TA-F)	2641-34-1
EtFHxSAA, its salts					
275	Potassium N-ethyl-n-[(tridecafluorohexyl)sulfonyl]glycinate (EtFHxSAA-K)	67584-53-6	276	Sodium N-ethyl-n-[(tridecafluorohexyl)sulfonyl]glycinate (EtFHxSAA-Na)	68555-70-4
10:2 FTS, its salts					
277	1H,1H,2H,2H-Perfluorododecane sulfonic acid sodium salt (10:2 FTS-Na)	108026-35-3			

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <<http://www.sgs.com/en/Terms-and-Conditions.aspx>> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 19 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
8:8 PFPI, its salts					
278	Bis(perfluorooctyl) phosphinic acid erbium(3+) salt (8:8 PFPI-Er)	500776-70-5	279	Bis(heptadecafluorooctyl)phosphinic Acid Sodium Salt (8:8 PFPI-Na)	500776-69-2
280	Bis(perfluorooctyl) phosphinic acid ytterbium(3+) salt (8:8 PFPI-Yb)	500776-71-6			
8:2 monoPAP, its salts					
281	Disodium 1H,1H,2H,2H-perfluorodecylphosphate	438237-75-3	282	8:2 Fluorotelomer diammonium phosphate	93857-44-4
283	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctanol phosphate ammonium salt	92401-44-0	284	Ammonium bis[2-(perfluorohexyl)ethyl] phosphate	1764-95-0
285	Monopotassium monoperfluorohexyl ethylphosphate	150033-28-6	286	Sodium 1H,1H,2H,2H-perfluorooctylphosphate	144965-22-0
287	Ammonium 2-(perfluorohexyl)ethyl hydrogen phosphate	2353-52-8			
FOSAA, its salts					
288	N-[(Perfluorooctyl)sulfonyl]glycine potassium salt (1:1) (FOSAA-K)	75260-69-4	289	N-[(Perfluorooctyl)sulfonyl]glycinate (FOSAA(anion))	909405-47-6
290	N-[(Perfluorooctyl)sulfonyl]glycine sodium salt (1:1) (FOSAA-Na)	115716-87-5			
N-MeFOSAA, its salts					
291	Potassium N-[(heptadecafluorooctyl)sulfonyl]-N-methylglycinate (N-Me-FOSAA-K)	70281-93-5	292	2-(N-Methylperfluorooctanesulfonamido)acetate (N-Me-FOSAA(anion))	909405-48-7
N-EtFOSAA, its salts					
293	2-(N-Ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA(anion))	909405-49-8	294	Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt (N-Et-FOSAA-K)	2991-51-7
295	Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-Na)	3871-50-9	296	Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-NH4)	2991-52-8
10:2 diPAP, its salts					
297	Bis((perfluorodecyl)ethyl) hydrogen phosphate 2,2'-iminodiethanol (10:2 diPAP-C4H11O2)	57677-98-2			
6:2 monoPAP, its salts					
298	Diammonium 6:2 fluorotelomer phosphate monoester (6:2 monoPAP-NH4NH4)	1000852-37-8			
6:2 FTPA, its salts					
299	Tridecafluorooctyl-phosphonic acid sodium salt (1:1) (Cheminox FHP 2OH-Na(PFHEPA-Na))	1189052-95-6			
6:6 PFPI, its salts					
300	Bis(perfluorohexyl) phosphinic acid ytterbium(3+) salt	500776-72-7 (6:6 PFPI-Yb)	301	Bis(perfluorohexyl)phosphinic acid sodium salt (6:6 PFPI-Na)	70609-44-8
302	Bis(perfluorohexyl) phosphinic acid erbium(3+) salt (6:6 PFPI-Er)	500776-73-8			
PFHxDA, its salts					
303	Hentriacontafluorohexadecanoate anion (PFHxDA(anion))	1214264-30-8			



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 20 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
PFODA, its salts					
304	Perfluorooctadecanoate anion (PFODA(anion))	798556-82-8			
PFPeDA, its salts					
305	Nonacosafuoropentadecanoate (PFPeDA(anion))	1214264-29-5			
6:2 diPAP, its salts					
306	Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) phosphate ion(1-) (6:2 diPAP(Anion))	667465-18-1	307	Sodium bis[2-(perfluorohexyl)ethyl]phosphate (6:2 diPAP-Na)	407582-79-0
TFSI, its salts					
308	Tributylmethylammonium Bis(trifluoromethanesulfonyl)imide	405514-94-5	309	1-Butyl-1-methylpyrrolidinium Bis(trifluoromethanesulfonyl)imide	223437-11-4
310	1-Decyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide	433337-23-6	311	Lithium Bis(trifluoromethane)sulfonimide (TFSI-Li)	90076-65-6
TFMS, its salts					
312	Silver trifluoromethanesulfonate (TFMS-Ag)	2923-28-6	313	Trifluoromethane sulfonic acid Sodium salt (TFMS-Na)	2926-30-9
314	Scandium trifluoromethanesulfonate (TFMS-Sc)	144026-79-9	315	Zinc trifluoromethanesulfonate (TFMS-Zn)	54010-75-2
316	Lithium trifluoromethanesulfonate (TFMS-Li)	33454-82-9	317	Trifluoromethanesulfonic anhydride	358-23-6
318	Barium trifluoromethanesulfonate (TFMS-Ba)	2794-60-7	319	Copper(II) trifluoromethanesulfonate (TFMS-Cu)	34946-82-2
320	Magnesium trifluoromethanesulfonate (TFMS-Mg)	60871-83-2	321	Cerium(IV) trifluoromethanesulfonate (TFMS-Ce)	107792-63-2
322	Nickel(II) Trifluoromethanesulfonate (TFMS-Ni)	60871-84-3	323	Potassium trifluoromethanesulfonate (TFMS-K)	2926-27-4
324	Yttrium(III) trifluoromethanesulfonate (TFMS-Y)	52093-30-8	325	Tin(II) trifluoromethanesulfonate (TFMS-Sn)	62086-04-8
326	Cerium(III) Trifluoromethanesulfonate (TFMS-Ce)	76089-77-5	327	Iron(III) trifluoromethanesulfonate (TFMS-Fe)	63295-48-7
328	Methytriocetyl ammonium trifluoromethanesulfonate	121107-18-4	329	Tetraethyl ammonium trifluoromethanesulfonate	35895-70-6
330	Trifluoroacetyl Trifluoromethanesulfonate	68602-57-3	331	Imidazole trifluoromethanesulfonate	29727-06-8
332	Indium(III) trifluoromethanesulfonate (TFMS-In)	128008-30-0	333	Lanthanum(III) trifluoromethanesulfonate (TFMS-La)	52093-26-2
334	Ytterbium(III) trifluoromethanesulfonate (TFMS-Yb)	54761-04-5	335	Samarium(III) trifluoromethanesulfonate (TFMS-Sm)	52093-28-4
336	Tetraethyl ammonium trifluoromethanesulfonate	35895-69-3	337	Thulium(III) trifluoromethanesulfonate (TFMS-Tm)	141478-68-4
338	Triethylamine salt of trifluoromethanesulfonic acid	646-58-2	339	1-Fluoro-3,5-dichloropyridinium triflate	107264-06-2
340	N,N-Diethyl-6-(diethylamino)-9-(2-(methoxycarbonyl)phenyl)-3H-xanthene-3-ylideneammonium trifluoromethanesulfonate	120611-30-5	341	Triphenylphosphonium anhydride triflate	72450-51-2
342	1-(3-aminoazetidin-1-yl)prop-2-en-1-one, trifluoromethanesulfonic acid	2060047-56-3	343	Diphenylammonium Trifluoromethanesulfonate	164411-06-7
344	Trifluoromethanesulfonic acid--1-ethyl-1H-imidazole (1/1)	501693-46-5	345	Guanidine trifluoromethanesulfonic acid	153756-25-3

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to the transaction from exercising all their rights and obligations under the transaction.

No.	Substances	CAS No.	No.	Substances	CAS No.
346	O-Pivaloylhydroxylamine trifluoromethanesulfonate	1293990-73-4	347	Ruthenium(3+), (OC-6-22)-, salt with trifluoromethanesulfonic acid (1:3)	74468-24-9
348	(2-Pyridylmethyl)sulfonyl chloride triflate	882564-09-2	349	Trifluoromethanesulfonyl chloride	421-83-0
350	Mercury(II) trifluoromethanesulfonate (TFMS-Hg)	49540-00-3	351	Trifluoromethanesulfonyl bromide	15458-53-4
352	Manganese bis(trifluoromethanesulfonate) (TFMS-Mn)	55120-76-8	353	Dysprosium(III) tris(trifluoromethanesulfonate) (TFMS-Dy)	139177-62-1
354	Lutetium(III) trifluoromethanesulfonate (TFMS-Lu)	126857-69-0	355	Pentaamine(trifluoromethanesulfonato)osmium(III) triflate	83781-30-0
356	Neodymium(III) trifluoromethanesulfonate (TFMS-Nd)	34622-08-7	357	Terbium(III) trifluoromethanesulfonate (TFMS-Tb)	148980-31-8
358	Holmium(III) trifluoromethanesulfonate (TFMS-Ho)	139177-63-2	359	Ammonium trifluoromethanesulfonate (TFMS-NH ₄)	38542-94-8
360	Praseodymium(III) trifluoromethanesulfonate (TFMS-Pr)	52093-27-3	361	Trifluoromethanesulfonate	37181-39-8
362	Europium(III) trifluoromethanesulfonate (TFMS-Eu)	52093-25-1	363	Bismuth(III) trifluoromethanesulfonate (TFMS-Bi)	88189-03-1
364	Gallium(III) trifluoromethanesulfonate (TFMS-Ga)	74974-60-0	365	Erbium(III) trifluoromethanesulfonate (TFMS-Er)	139177-64-3
366	Methanesulfonic acid, trifluoro-, calcium salt (TFMS-Ca)	55120-75-7	367	N,N,N-Triethyl-2,2,2-trifluoroethan-1-aminium trifluoromethanesulfonate	380230-73-9
368	Hafnium(IV) Trifluoromethanesulfonate (TFMS-Hf)	161337-67-3	369	Thallium(1+) trifluoromethanesulfonate (TFMS-Tl)	73491-36-8
PFPrS, its salts					
370	Perfluoropropanesulfonic acid sodium salt (PFPrS-Na)	359868-82-9			
PFOPa, its salts					
371	(Heptadecafluorooctyl)phosphonic acid-4-methylaniline(1:1)	1263361-03-0			
5:3-FTCA its salts					
372	2H,2H,3H,3H-Perfluorooctanoate (anion) 5:3 FTCA [®] (anion)	1799325-94-2			
PFEESA, its salts					
373	Sodium perfluoro(2-ethoxyethane) sulfonate (PFEESA-Na)	113507-87-2	374	Potassium perfluoro(2-ethoxyethane) sulfonate (PFEESA-K)	117205-07-9
No.	Substances	CAS No.	No.	Substances	CAS No.
3:3 FTCA, its salts					
375	4,4,5,5,6,6,6-Heptafluorohexanoate (3:3 FTCA(anion))	1169706-83-5			
PFEtS, its salts					
376	Potassium pentafluoroethane-1-sulfonate (PFEtS-K)	2837-92-5	377	Pentafluoroethanesulfonate (PFEtS (anion))	108410-37-3



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 22 of 23

No.	Substances	CAS No.	No.	Substances	CAS No.
TFA, its salts					
378	Thallium(III) trifluoroacetate (TFA-Tl)	23586-53-0	379	Sodium trifluoroacetate (TFA-Na)	2923-18-4
380	Silver trifluoroacetate (TFA-Ag)	2966-50-9	381	Lithium Trifluoroacetate (TFA-Li)	2923-17-3
382	Potassium trifluoroacetate (TFA-K)	2923-16-2	383	Cesium Trifluoroacetate (TFA-Cs)	21907-50-6
384	Mercury(II) trifluoroacetate (TFA-Hg)	13257-51-7	385	Ammonium trifluoroacetate (TFA-NH ₄)	3336-58-1
386	Trifluoroacetate / Trifluoroacetic acid anion (TFA anion)	14477-72-6	387	Palladium(II) trifluoroacetate (TFA-Pd)	42196-31-6
388	Aluminium tris(trifluoroacetate)+D586 (TFA-Al)	36554-89-9	389	Dimethyl[(trifluoroacetyl)oxy]sulfonium trifluoroacetate	57738-66-6
390	Erbium tris(trifluoroacetate) (TFA-Er)	70236-99-6	391	Barium bis(trifluoroacetate) (TFA-Ba)	60884-92-6
392	Lanthanum tris(trifluoroacetate) (TFA-La)	70236-92-9	393	Indium trifluoroacetate (TFA-In)	36554-90-2
394	Lead(II) trifluoroacetate (TFA-Pb)	4146-73-0	395	Nickel(2+) trifluoroacetate (TFA-Ni)	16083-14-0
396	Thulium tris(trifluoroacetate) (TFA-Tm)	70237-00-2	397	Acetic acid, trifluoro-, rhodium(2+) salt (TFA-Rh)	72654-51-4
398	Zinc bis(trifluoroacetate) (TFA-Zn)	21907-47-1	399	Ytterbium(3+) tris(trifluoroacetate) (TFA-Yb)	87863-62-5
400	Magnesium 2,2,2-trifluoroacetate (TFA-Mg)	123333-72-2	401	Ruthenium(II) 2,2,2-trifluoroacetate (TFA-Ru)	61612-84-8
402	Copper(2+) trifluoroacetate (TFA-Cu)	123333-88-0			

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction.



Test Report No. F690101/LF-CTSAYAA26-08159

Issued Date : 2026. 02. 20

Page 23 of 23

Appendix 2 - The listed substances are likely hydrolyzed and release to corresponding PFAS when treated with strong alkaline solvents. It contributes to the amount of corresponding PFAS if present in the sample.

Substances	CAS No.	Substances	CAS No.
Possible Source contributes to PFOA			
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	Methyl perfluorooctanoate (Me-PFOA)	376-27-2
Possible Source contributes to 4:2 FTOH			
1H,1H,2H,2H-Nonafluorohexyl acrylate (4:2 FTA)	52591-27-2	1H,1H,2H,2H-Perfluorohexyl methacrylate (4:2 FTMA)	1799-84-4
Possible Source of 6:2 FTOH			
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6
Possible Source contributes to 8:2 FTOH			
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9
1H,1H,2H,2H-perfluorodecyl acetate (8:2 FTOAc)	37858-04-1		
Possible Source contributes to 10:2 FTOH			
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5
1H,1H,2H,2H-perfluorododecyl acetate (10:2 FTOAc)	37858-05-2		
Possible Source contributes to MeFHxSE			
2-[methyl[(tridecafluorohexyl) sulfonyl]amino]ethyl acrylate)) (N-MeFHSEA)	67584-57-0	2-Propenoic acid, 2-methyl-, 2-[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester	67584-61-6
Possible Source contributes to N-EtFOSE			
2-(N-ethylperfluorooctanesulfamido)ethyl acrylate (EtFOSAC)	423-82-5		
Possible Source contributes to Et-FHxSE			
2-Propenoic acid, 2-methyl-, 2-[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester (EtFHxSEMA)	67906-70-1		
Possible Source contributes to PFHpA			
Perfluoroheptanamide (PFHpA-NH ₂)	2358-22-7		
Possible Source contributes to PFBA			
Perfluorobutyramide (PFBA-NH ₂)	662-50-0		

*** End of Report ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction.