

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



## SVHC Assessment Report

**Client:** Hengdian Group DMEGC Magnetics Co., LTD  
Hengdian Industrial Zone, 322118 Dongyang City, Zhejiang Province P.R. China

**Contact person:** Wang Guoqiang

**Test object:** **The tested object(s) was(were) submitted and described by client as:**

Product: PV Modules

Model refer to the APPENDIX I

**Purpose of examination:** 1) According to customer's requirement, testing Perfluoroalkyl and polyfluoroalkyl substances (PFAS) content.

**Test method:** 1) In house method, solvent extraction and determination by LC/MS/MS, GC/MS and GC/MS/MS.

**Test results:** Refer to next page(s).

**Remark:**

1. The tested samples were identified and appointed by client.
2. The result relates only to the items tested.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.



**Report No.** 48.400.23.0957.01-01/02

**Dated** 2023-09-28

**1 Order**

**1.1 Date of Order:**

2023-09-07

**1.2 Receipt Date of Test Sample:**

2023-09-07

**1.3 Date of Testing:**

2023-09-07 – 2023-09-28

**1.4 Location of Testing**

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Shanghai Branch, SHA Chemical Lab.

TEC\_WUX\_F\_25.03E – Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and  
Technological Development Zone, Wuxi Jiangsu. China

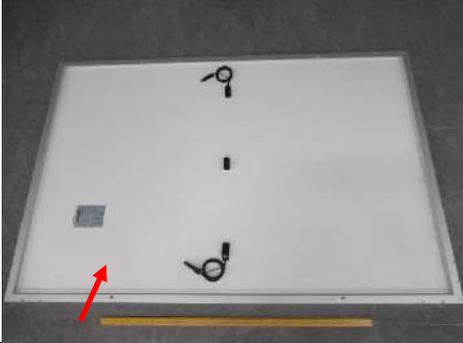
Tel.: +86-510-88203737  
Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



2. Description of the Evaluated Product

Sample No	Description	Photograph
01	White plastic rear cover	
02	Blue solar cell	
03	Silvery label	
04	White label	

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Sample No	Description	Photograph
05	White glue	
06	White glue	
07	Black plastic plug enclosure	
08	Black plastic shell	

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

Sample No	Description	Photograph
09	Black plastic cable sleeve	
10	Black plastic cable jacket	
11	Blue solar cell (16BB Topcon)	
12	Transparent plastic tape 3M	

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Sample No	Description	Photograph
13	Transparent plastic tape Shangrui	

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



3. Test Data:

3.1 Perfluoroalkyl and polyfluoroalkyl substances (PFAS) content testing result

Tested Items	MDL	Unit	Result	
			01	02
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecanefluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
perfluoro-1-octanesulfonylfluoride (POSF/PFOSF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluordodecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TUV SUD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 9 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 12 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			01	02
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C2H5)3N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636  
Page 13 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecafluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 14 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 17 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 18 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 19 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			03	04
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636  
Page 20 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecanefluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 21 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 22 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 23 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 24 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 25 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 26 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			05	06
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecafluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOSF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737

Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 29 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 31 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 33 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			07	08
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636  
Page 34 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecafluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOSF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 35 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 36 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TUV SUD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737

Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 39 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 40 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			09	10
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E – Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.	N.D.
7H-Dodecafluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOSF)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TUV SUD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 42 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.	N.D.
PFBA-Na	0.01	mg/kg	N.D.	N.D.
PFBA-NH2	0.01	mg/kg	N.D.	N.D.
PFPA-Na	0.01	mg/kg	N.D.	N.D.
PFPA-K	0.01	mg/kg	N.D.	N.D.
PFPA-NH4	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 43 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
PFHxA-Na	0.01	mg/kg	N.D.	N.D.
PFHxA-K*	0.01	mg/kg	N.D.	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-Na	0.01	mg/kg	N.D.	N.D.
PFHpA-K	0.01	mg/kg	N.D.	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.	N.D.
PFBS-H2O	0.01	mg/kg	N.D.	N.D.
PFODA	0.01	mg/kg	N.D.	N.D.
PFHxDA	0.01	mg/kg	N.D.	N.D.
H2PFDA	0.01	mg/kg	N.D.	N.D.
PFHpS-K	0.01	mg/kg	N.D.	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.	N.D.
PFSI	0.2	mg/kg	N.D.	N.D.
8:2 FTI	0.2	mg/kg	N.D.	N.D.
8:2diPAP	0.01	mg/kg	N.D.	N.D.
HFPO-DA	0.01	mg/kg	N.D.	N.D.
PFPS	0.01	mg/kg	N.D.	N.D.
PFPS-K	0.01	mg/kg	N.D.	N.D.
PFPS-Na	0.01	mg/kg	N.D.	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 44 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 45 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 46 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 47 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result	
			11	12
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C2H5)3N)	0.01	mg/kg	N.D.	N.D.

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636  
Page 48 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
Heptafluorobutyric acid(PFBA))	0.01	mg/kg	N.D.
Perfluoropentane Acid (PFPA)	0.01	mg/kg	N.D.
Perfluorohexane Acid (PFHxA)	0.01	mg/kg	N.D.
7H-Dodecafluoroheptane Acid (HPFHpA)	0.01	mg/kg	N.D.
Perfluorobutane Sulfonate (PFBS)	0.01	mg/kg	N.D.
Potassium nonafluoro-1-butanesulfonate(PFBS-K)*	0.01	mg/kg	N.D.
Perfluoroheptane Acid (PFHpA)	0.01	mg/kg	N.D.
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	0.01	mg/kg	N.D.
Perfluorooctanoic acid (PFOA)	0.01	mg/kg	N.D.
Ammonium Pentadecafluorooctanoate (APFO)*	0.01	mg/kg	N.D.
Sodium perfluorooctanoate(Na-PFO)*	0.01	mg/kg	N.D.
Potassium perfluorooctanoate(K-PFO)*	0.01	mg/kg	N.D.
Silver perfluorooctanoate(Ag-PFO)*	0.01	mg/kg	N.D.
Perfluorooctanoyl fluoride(F-PFO)*	0.01	mg/kg	N.D.
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	0.01	mg/kg	N.D.
Perfluorohexane Sulfonate (PFHxS)	0.01	mg/kg	N.D.
Sodium Perfluorohexanesulfonate(PFHxS-Na)*	0.01	mg/kg	N.D.
Potassium perfluorohexanesulfonate(PFHxS-K)*	0.01	mg/kg	N.D.
Perfluorononanoic acid (PFNA)	0.01	mg/kg	N.D.
Sodium perfluorononanoate(PFNA-Na)*	0.01	mg/kg	N.D.
Ammonium perfluoropelargonate(APFN)*	0.01	mg/kg	N.D.
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	0.01	mg/kg	N.D.
Perfluoroheptane Sulfonate (PFHpS)	0.01	mg/kg	N.D.
Pentadecafluoro-1-heptanesulfinic acid sodium salt(PFHpS-Na)*	0.01	mg/kg	N.D.
Perfluorodecanoic acid (PFDA)	0.01	mg/kg	N.D.
Perfluorodecanoic acid,sodium salt(PFDA-Na)*	0.01	mg/kg	N.D.
Ammonium perfluorodecanoate(APFDA)*	0.01	mg/kg	N.D.
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	0.01	mg/kg	N.D.
Perfluorooctansulfonate (PFOS)	0.01	mg/kg	N.D.
Perfluorooctane sulphonamide(PFOSA)	0.01	mg/kg	N.D.
N-Methylheptadecafluorooctane-sulphonamide (N-Me-FOSA)	0.01	mg/kg	N.D.
N-Ethylperfluorooctane-1-sulfonamide(N-Et-FOSA)	0.01	mg/kg	N.D.
N-Me-FOSE alcohol (N-Me-FOSE)	0.01	mg/kg	N.D.
N-ET-FOSE alcohol (N-ET-FOSE)	0.01	mg/kg	N.D.
perfluoro-1-octanesulfonyl fluoride (POSF/PFOF)*	0.01	mg/kg	N.D.
Potassium perfluorooctanesulphonate(PFOS-K)*	0.01	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
Ammonium perfluorooctanesulfonate(PFOS-NH4)*	0.01	mg/kg	N.D.
Didecyl(dimethyl)azanium;1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate(PFOS-DDA)*	0.01	mg/kg	N.D.
Perfluoro-1-octanesulfonic acid, diethanolamine salt(PFOS-NH(OH)2)*	0.01	mg/kg	N.D.
Lithium perfluorooctylsulfonate(PFOS-Li)*	0.01	mg/kg	N.D.
Heptadecafluorooctanesulfonic acid tetraethylammonium salt(PFOS-N(C2H5)4)*	0.01	mg/kg	N.D.
Perfluoroundecanoic Acid (PFUnA)	0.01	mg/kg	N.D.
Perfluorododecanoic Acid (PFDoA)	0.01	mg/kg	N.D.
Perfluorodecane Sulfonate (PFDS)	0.01	mg/kg	N.D.
Sodium Perfluoro-1-decanesulfonate(PFDS-Na)*	0.01	mg/kg	N.D.
Potassium henicosafuorodecanesulphonate(PFDS-K)*	0.01	mg/kg	N.D.
Ammonium henicosafuorodecanesulphonate(PFDS-NH4)*	0.01	mg/kg	N.D.
Perfluorotridecanoic Acid (PFTrA)	0.01	mg/kg	N.D.
Perfluorotetradecanoic Acid (PFTeA)	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.01	mg/kg	N.D.
Methyl perfluorooctanoate (Me-PFOA)	0.01	mg/kg	N.D.
Ethyl perfluorooctanoate (Et-PFOA)	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	0.2	mg/kg	N.D.
Perfluorooctyl iodide (PFOI)	0.5	mg/kg	N.D.
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	0.2	mg/kg	N.D.
Sodium Perfluoro-1-octanesulfonate(PFOS-Na)*	0.01	mg/kg	N.D.
PFBA-Na	0.01	mg/kg	N.D.
PFBA-NH2	0.01	mg/kg	N.D.
PFPA-Na	0.01	mg/kg	N.D.
PFPA-K	0.01	mg/kg	N.D.
PFPA-NH4	0.01	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 50 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
PFHxA-Na	0.01	mg/kg	N.D.
PFHxA-K*	0.01	mg/kg	N.D.
PFHxA-NH4	0.01	mg/kg	N.D.
HPFHpA-Na	0.01	mg/kg	N.D.
PFHpA-Na	0.01	mg/kg	N.D.
PFHpA-K	0.01	mg/kg	N.D.
PFHpA-NH2	0.01	mg/kg	N.D.
PFBS-H2O	0.01	mg/kg	N.D.
PFODA	0.01	mg/kg	N.D.
PFHxDA	0.01	mg/kg	N.D.
H2PFDA	0.01	mg/kg	N.D.
PFHpS-K	0.01	mg/kg	N.D.
6:2 FTMAC	0.2	mg/kg	N.D.
N-MeFOSAA	0.01	mg/kg	N.D.
N-EtFOSAA	0.01	mg/kg	N.D.
PFSI	0.2	mg/kg	N.D.
8:2 FTI	0.2	mg/kg	N.D.
8:2diPAP	0.01	mg/kg	N.D.
HFPO-DA	0.01	mg/kg	N.D.
PFPS	0.01	mg/kg	N.D.
PFPS-K	0.01	mg/kg	N.D.
PFPS-Na	0.01	mg/kg	N.D.
pentafluoropropionic acid(PFPra)	0.01	mg/kg	N.D.
sodium pentafluoropropionate	0.01	mg/kg	N.D.
potassium pentafluoropropionate	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.01	mg/kg	N.D.
magnesium bis[heptadecafluorooctanesulphonate]	0.01	mg/kg	N.D.
1-Octanesulfonicacid,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-,compd.withpiperidine(1:1)	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluorododecansulfonsaure (10:2 FTS)	0.01	mg/kg	N.D.
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations th	0.01	mg/kg	N.D.
Ammonium Perfluorododecanoate (PFDoDA-NH4)	0.01	mg/kg	N.D.
1,1,2,2-Tetrahydroperfluorododecyl methacrylate(10:2FTMA)	0.2	mg/kg	N.D.
1,1,2,2-Tetrahydroperfluoro-1-tetradecanol(12:2FTOH)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorododecyl iodide(10:2FTI)	0.2	mg/kg	N.D.
1H,1H,2H,2H-Perfluorotetradecyliodide(12:2FTI)	0.2	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
N-Methyl-perfluorohexane-1-sulfonamide (N-Me-FHxSA)	0.01	mg/kg	N.D.
Perfluorohexanesulfonamide(PFHxSA)	0.01	mg/kg	N.D.
Perfluorooctanesulfonate*	0.01	mg/kg	N.D.
Perfluorooctanoate*	0.01	mg/kg	N.D.
Lithium perfluorooctanoate(PFOA-Li)*	0.01	mg/kg	N.D.
Pentadecafluorooctanoic acid-pyridine (1/1)(PFOA-Pyridine)*	0.01	mg/kg	N.D.
Perfluorooctanoate N,N,N-trimethylmethanaminium*	0.01	mg/kg	N.D.
Perfluorononanoate(PFNA-)*	0.01	mg/kg	N.D.
Silver perfluorononanoate(PFNA-Ag)*	0.01	mg/kg	N.D.
Potassium perfluorononanoate(PFNA-K)*	0.01	mg/kg	N.D.
Methanaminium perfluorononanoate(PFNA-CH3NH2)*	0.01	mg/kg	N.D.
Cyclohexanaminium perfluorononanoate(PFNA-C6H11NH2)*	0.01	mg/kg	N.D.
N,N-Diethylethanaminium heptadecafluorononanoate*	0.01	mg/kg	N.D.
Silver perfluorobutanoate(PFBA-Ag)*	0.01	mg/kg	N.D.
Perfluorobutanoate(PFBA-)*	0.01	mg/kg	N.D.
Ammonium perfluorobutanoate(PFBA-NH3)*	0.01	mg/kg	N.D.
Potassium perfluorobutyrate(PFBA-K)*	0.01	mg/kg	N.D.
Lithium perfluorobutanoate(PFBA-Li)*	0.01	mg/kg	N.D.
Tetraethylazanium nonafluorobutane-1-sulfonate*	0.01	mg/kg	N.D.
Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate(PFBS-NH4)*	0.01	mg/kg	N.D.
Perfluorobutanesulfonate(PFBS-)*	0.01	mg/kg	N.D.
Tetramethylammonium perfluorobutane sulfonate*	0.01	mg/kg	N.D.
Sodium perfluorobutylsulfonate(PFBS-Na)*	0.01	mg/kg	N.D.
Lithium nonafluorobutanesulfonate(PFBS-Li)*	0.01	mg/kg	N.D.
Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate (PFBS-(CH2CH2CH2OH)2NH)*	0.01	mg/kg	N.D.
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide(PFBS-N-(2-hydroxyethyl)-N-methyl)*	0.01	mg/kg	N.D.
Perfluoropentanoate(PFPA-)*	0.01	mg/kg	N.D.
Silver perfluoropentanoate(PFPA-Ag)*	0.01	mg/kg	N.D.
Lithium perfluoropentanoate(PFPA-Li)*	0.01	mg/kg	N.D.
Silver perfluorohexanoate(PFHxA-Ag)*	0.01	mg/kg	N.D.
Perfluorohexanoate(PFHxA-)*	0.01	mg/kg	N.D.
Lithium perfluorohexanoate(PFHxA-Li)*	0.01	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 52 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
Undecafluorohexanoic acid-piperazine (1:1)(PFHxA-Piperazine)*	0.01	mg/kg	N.D.
Undecafluorohexanoic acid--hexan-1-amine (1/1)(PFHxA-Hexylamine)*	0.01	mg/kg	N.D.
Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate(HPFHpA-NH4)*	0.01	mg/kg	N.D.
7-H-Perfluoroheptanoate(HPFHpA-)*	0.01	mg/kg	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate(6:2 FTSA-)*	0.01	mg/kg	N.D.
3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt(6:2 FTSA-NH4)*	0.01	mg/kg	N.D.
Perfluorohexanesulfonate(PFHxS-)*	0.01	mg/kg	N.D.
Triethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.
Tetraethylammonium perfluorohexane sulfonate*	0.01	mg/kg	N.D.
Lithium perfluorohexanesulfonate(PFHxS-Li)*	0.01	mg/kg	N.D.
Ammonium perfluorohexanesulfonate(PFHxS--NH4)*	0.01	mg/kg	N.D.
Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate*	0.01	mg/kg	N.D.
Nonadecafluorodecanoate(PFDA-)*	0.01	mg/kg	N.D.
Potassium perfluorodecanoate(PFDA-K)*	0.01	mg/kg	N.D.
Lithium perfluorodecanoate(PFDA-Li)*	0.01	mg/kg	N.D.
Silver perfluorodecanoate(PFDA-Ag)*	0.01	mg/kg	N.D.
Perfluorodecanesulfonate(PFDS-)*	0.01	mg/kg	N.D.
Perfluoroheptanesulfonate(PFHpS-)*	0.01	mg/kg	N.D.
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate*	0.01	mg/kg	N.D.
Ammonium perfluoroheptanesulfonate(PFHpS-NH4)*	0.01	mg/kg	N.D.
Triethylammonium perfluoroheptane sulfonate*	0.01	mg/kg	N.D.
Perfluoropentanesulfonate(PFPS-)*	0.01	mg/kg	N.D.
Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate(PFPS-NH4)*	0.01	mg/kg	N.D.
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate*	0.01	mg/kg	N.D.
Triethylammonium perfluoropentane sulfonate*	0.01	mg/kg	N.D.
Lithium perfluoropentane sulfonate(PFPS-Li)*	0.01	mg/kg	N.D.
Silver perfluoropropanoate(PFPrA-Ag)*	0.01	mg/kg	N.D.
Perfluoropropanoate(PFPrA-)*	0.01	mg/kg	N.D.
Ammonium pentafluoropropionate(PFPrA-NH4)*	0.01	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 53 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
Potassium 1H,1H,2H,2H-perfluoroundecanoate(H4PFUnA-K)*	0.01	mg/kg	N.D.
Lithium 3-(perfluorooctyl)propanoate(H4PFUnA-Li)*	0.01	mg/kg	N.D.
Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1)*	0.01	mg/kg	N.D.
Perfluorooctanesulfonamide lithium salt (1:1)(PFOSA-Li)*	0.01	mg/kg	N.D.
Perfluorooctanesulfonamide sodium salt (1:1)(PFOSA-Na)*	0.01	mg/kg	N.D.
Perfluoroundecanoate(PFUnA-)*	0.01	mg/kg	N.D.
Sodium perfluoroundecanoate(PFUnA-Na)*	0.01	mg/kg	N.D.
Potassium perfluoroundecanoate(PFUnA-K)*	0.01	mg/kg	N.D.
Ammonium perfluoroundecanoate(PFUnA-NH4)*	0.01	mg/kg	N.D.
Perfluorododecanoate(PFDoA-)*	0.01	mg/kg	N.D.
Sodium Perfluorododecanoate(PFDoA-Na)*	0.01	mg/kg	N.D.
Perfluorotridecanoate(PFTrA-)*	0.01	mg/kg	N.D.
Ammonium perfluorotridecanoate(PFTrA-NH4)*	0.01	mg/kg	N.D.
Perfluorotetradecanoate(PFTeA-)*	0.01	mg/kg	N.D.
4:2 Fluorotelomer sulfonate(4:2 FTS-)*	0.01	mg/kg	N.D.
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate(4:2 FTS-Na)*	0.01	mg/kg	N.D.
2-(Perfluorooctyl)ethane-1-sulfonate(8:2FTS-)*	0.01	mg/kg	N.D.
8:2 Fluorotelomer sulfonate ammonium salt(8:2FTS-NH4)*	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium(8:2FTS-Na)*	0.01	mg/kg	N.D.
Potassium 2-(perfluorooctyl)ethane-1-sulfonate(8:2FTS-K)*	0.01	mg/kg	N.D.
1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium( 10:2 FTS-Na)*	0.01	mg/kg	N.D.
Perfluorooctadecanoate anion(PFODA-)*	0.01	mg/kg	N.D.
Hentriacontafluorohexadecanoate anion(PFHxDA-)*	0.01	mg/kg	N.D.
N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt(N-MeFOSAA-K)	0.01	mg/kg	N.D.
2-(N-Methylperfluorooctanesulfonamido)acetate(N-MeFOSAA-)	0.01	mg/kg	N.D.
Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-NH4)	0.01	mg/kg	N.D.
2-(N-Ethyl-perfluorooctanesulfonamido)acetate(N-EtFOSAA-)	0.01	mg/kg	N.D.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
 Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
 Fax: +86-510-88203636  
 Page 54 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



Tested Items	MDL	Unit	Result
			13
Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate(N-EtFOSAA-Na)	0.01	mg/kg	N.D.
potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate(N-EtFOSAA-K)	0.01	mg/kg	N.D.
Triethylaminium perfluoro-2-propoxypropanoate(HFPO-DA-(C2H5)3N)	0.01	mg/kg	N.D.

**Remark:**

1. N.D.=Not Detected (<MDL)
2. "mg/kg" denotes "milligram per kilogram"
3. "\*" denotes the data was converted based on results of related compounds

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

**TÜV SÜD Certification and Testing (China) Co., Ltd.**

**Prepared by:**

**Mr. Jialong HAN**

**Checked by:**

**Mr. Feng ZHANG**

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636  
Page 55 of 58

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



APPENDIX I: Product Model

Product: PV Modules	
DM410M10-54HSW	DM545M10-B72HSW
DM575M10T-72HSW	DM570M10T-B72HSW
<p>Additional model:</p> <p>TOPCon series:</p> <p>DMXXXM10T-54HSW, DMXXXM10T-54HBW, DMXXXM10T-54HBB, DMXXXM10T-60HSW, DMXXXM10T-60HBW, DMXXXM10T-60HBB, DMXXXM10T-66HSW, DMXXXM10T-66HBW, DMXXXM10T-66HBB, DMXXXM10T-72HSW, DMXXXM10T-72HBW, DMXXXM10T-72HBB, DMXXXM10T-78HSW, DMXXXM10T-78HBW, DMXXXM10T-78HBB, DMXXXM10T-54HSW-V, DMXXXM10T-54HBW-V, DMXXXM10T-54HBB-V, DMXXXM10T-60HSW-V, DMXXXM10T-60HBW-V, DMXXXM10T-60HBB-V, DMXXXM10T-66HSW-V, DMXXXM10T-66HBW-V, DMXXXM10T-66HBB-V, DMXXXM10T-72HSW-V, DMXXXM10T-72HBW-V, DMXXXM10T-72HBB-V, DMXXXM10T-78HSW-V, DMXXXM10T-78HBW-V, DMXXXM10T-78HBB-V, DMXXXM10T-B54HSW, DMXXXM10T-B54HBW, DMXXXM10T-B54HST, DMXXXM10T-B54HBT, DMXXXM10T-B54HBB, DMXXXM10T-B60HSW, DMXXXM10T-B60HBW, DMXXXM10T-B60HST, DMXXXM10T-B60HBT, DMXXXM10T-B60HBB, DMXXXM10T-B66HSW, DMXXXM10T-B66HBW, DMXXXM10T-B66HST, DMXXXM10T-B66HBT, DMXXXM10T-B66HBB, DMXXXM10T-B72HSW, DMXXXM10T-B72HBW, DMXXXM10T-B72HST, DMXXXM10T-B72HBT, DMXXXM10T-B72HBB,</p>	

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

Disclaimer Measurement Uncertainty:

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TUV SUD Certification and Testing (China) Co., Ltd. Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737 Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



DMXXXM10T-B78HSW, DMXXXM10T-B78HBW, DMXXXM10T-B78HST, DMXXXM10T-B78HBT, DMXXXM10T-B78HBB,  
DMXXXM10RT-54HSW, DMXXXM10RT-54HBW, DMXXXM10RT-54HBB, DMXXXM10RT-54HSW-V, DMXXXM10RT-54HBW-V, DMXXXM10RT-54HBB-V, DMXXXM10RT-B54HSW, DMXXXM10RT-B54HBW, DMXXXM10RT-B54HST, DMXXXM10RT-B54HBT, DMXXXM10RT-B54HBB,  
DMXXXM10RT-B54HSW-L, DMXXXM10RT-B54HBW-L, DMXXXM10RT-B54HST-L, DMXXXM10RT-B54HBT-L, DMXXXM10RT-B54HBB-L,  
DMXXXG12RT-66HSW, DMXXXG12RT-66HBW, DMXXXG12RT-66HBB, DMXXXG12RT-66HSW-V, DMXXXG12RT-66HBW-V, DMXXXG12RT-66HBB-V,  
DMXXX G12RT-B66HSW, DMXXX G12RT-B66HBW, DMXXX G12RT-B66HST, DMXXX G12RT-B66HBT, DMXXXG12RT-B66HBB;  
DMXXXG12T-66HSW, DMXXXG12T-66HBW, DMXXXG12T-66HBB, DMXXXG12T-66HSW-V, DMXXXG12T-66HBW-V, DMXXXG12T-66HBB-V,  
DMXXX G12T-B66HSW, DMXXX G12T-B66HBW, DMXXX G12T-B66HST, DMXXX G12T-B66HBT, DMXXXG12T-B66HBB;  
DMXXXG12T-60HSW, DMXXXG12T-60HBW, DMXXXG12T-60HBB, DMXXXG12T-60HSW-V, DMXXXG12T-60HBW-V, DMXXXG12T-60HBB-V,  
DMXXX G12T-B60HSW, DMXXX G12T-B60HBW, DMXXX G12T-B60HST, DMXXX G12T-B60HBT, DMXXXG12T-B60HBB;  
PERC seires:  
DMXXXM6-60HSW, DMXXXM6-60HBW, DMXXXM6-60HBB, DMXXXM6-72HSW, DMXXXM6-72HBW, DMXXXM6-72HBB,  
DMXXXM10-54HSW, DMXXXM10-54HBW, DMXXXM10-54HBB, DMXXXM10-60HSW, DMXXXM10-60HBW, DMXXXM10-60HBB,  
DMXXXM10-66HSW, DMXXXM10-66HBW, DMXXXM10-66HBB, DMXXXM10-72HSW, DMXXXM10-72HBW, DMXXXM10-72HBB,  
DMXXXM10-78HSW, DMXXXM10-78HBW, DMXXXM10-78HBB, DMXXXM6-60HSW-V, DMXXXM6-60HBW-V, DMXXXM6-60HBB-V,  
DMXXXM6-72HSW-V, DMXXXM6-72HBW-V, DMXXXM6-72HBB-V, DMXXXM10-54HSW-V, DMXXXM10-54HBW-V, DMXXXM10-54HBB-V,  
DMXXXM10-60HSW-V, DMXXXM10-60HBW-V, DMXXXM10-60HBB-V, DMXXXM10-66HSW-V, DMXXXM10-66HBW-V, DMXXXM10-66HBB-V, DMXXXM10-72HSW-V,  
DMXXXM10-72HBW-V, DMXXXM10-72HBB-V, DMXXXM10-78HSW-V, DMXXXM10-78HBW-V, DMXXXM10-78HBB-V,  
DMXXXM6-B60HSW, DMXXXM6-B60HBW, DMXXXM6-B60HST, DMXXXM6-B60HBT, DMXXXM6-B60HBB,  
DMXXXM6-B72HSW, DMXXXM6-B72HBW, DMXXXM6-B72HST, DMXXXM6-B72HBT, DMXXXM6-B72HBB,

TEC\_WUX\_F\_25.03E - Rev. 00 2021-06-24

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737  
Fax: +86-510-88203636

Report No. 48.400.23.0957.01-01/02

Dated 2023-09-28



DMXXXM10-B54HSW, DMXXXM10-B54HBW, DMXXXM10-B54HST, DMXXXM10-B54HBT, DMXXXM10-B54HBB,  
DMXXXM10-B60HSW, DMXXXM10-B60HBW, DMXXXM10-B60HST, DMXXXM10-B60HBT, DMXXXM10-B60HBB,  
DMXXXM10-B66HSW, DMXXXM10-B66HBW, DMXXXM10-B66HST, DMXXXM10-B66HBT, DMXXXM10-B66HBB,  
DMXXXM10-B72HSW, DMXXXM10-B72HBW, DMXXXM10-B72HST, DMXXXM10-B72HBT, DMXXXM10-B72HBB,  
DMXXXM10-B78HSW, DMXXXM10-B78HBW, DMXXXM10-B78HST, DMXXXM10-B78HBT, DMXXXM10-B78HBB;

Greenhouse series which are with the model name start with "GH"

GH series other type:

GHXXXG1-60SW-C, GHXXXM6-B54HST-C, GHXXXM6-B54HSW-C, GHXXXM6-B66HST-C, GHXXXM6-B66HSW-C, GHXXXM6-B72HST-C, GHXXXM6-B72HSW-C, GHXXXM10-B48HST-C, GHXXXM10-B66HST-C, GHXXXM10-B66HSW-C, GHXXXM10-B72HST-C, GHXXXM10-B72HSW-C, GHXXXM10T-B48HST-C, GHXXXM10T-B66HST-C, GHXXXM10T-B66HSW-C, GHXXXM10T-B72HST-C, GHXXXM10T-B72HSW-C

XXX means module nameplate power.

Remark:

1. The report covers material testing on specified samples.
2. The tested materials covered by the report were declared by the manufacturer to be used on the additional model.

--END OF REPORT--

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.*

**Disclaimer Measurement Uncertainty:**

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

TÜV SÜD Certification and Testing (China) Co., Ltd.  
Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi Jiangsu. China

Tel.: +86-510-88203737

Fax: +86-510-88203636

Page 58 of 58