



Report No. 48.400.25.0796.01-00/04

Dated 2025-08-29

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 submitted Products were received and described by client as:

Product: PV Modules

Model: DM445M10RT-B54HSW

Additional Model refer to APPENDIX I

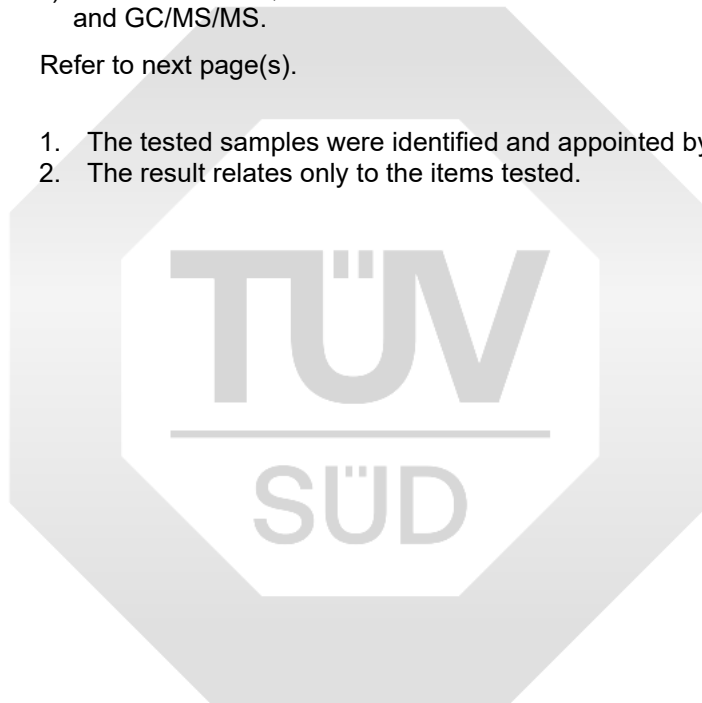
Tested sample description: Refer to next page(s).

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.



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1. Order

1.1 Date of Purchase Order

2025-07-01

1.2 Customer's Reference

Nil

1.3 Receipt Date of Test Sample

2025-06-25

2025-08-01 (Sample 01)

2025-08-06 (Sample 02)

2025-08-19 (Sample 16)

1.4 Date of Testing

2025-07-01 – 2025-07-30

2025-08-01 – 2025-08-08 (Sample 01)

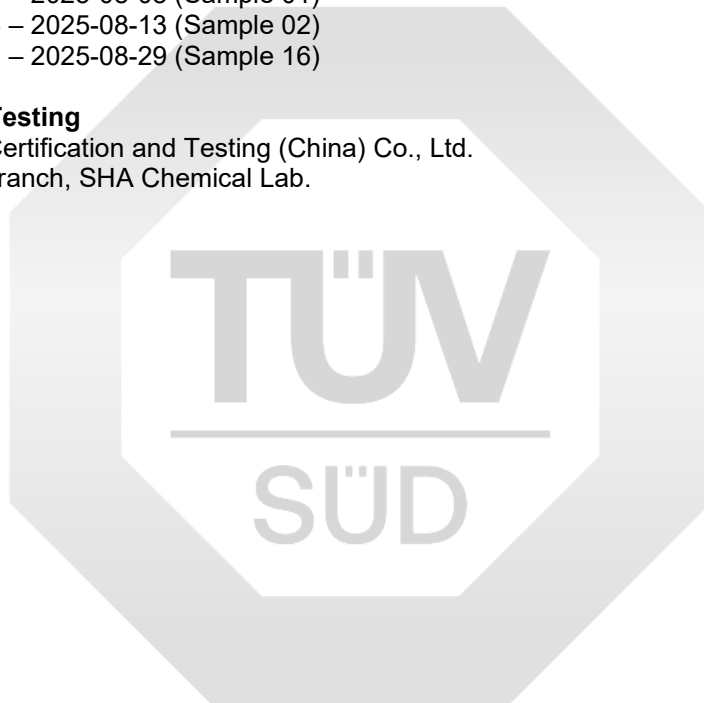
2025-08-06 – 2025-08-13 (Sample 02)

2025-08-19 – 2025-08-29 (Sample 16)

1.5 Location of Testing

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

Shanghai Branch, SHA Chemical Lab.



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2. Tested sample description:

Sample No.	Description	Photograph/Location
01	Translucent glass coating solution	
02	White glue	
03	Translucent plastic inner film	
04	Translucent plastic inner film	

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2. Tested sample description:

Sample No.	Description	Photograph/Location
05	Blue solar cell sheet	
06	Silvery label	
07	White label	
08	White glaze	

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2. Tested sample description:

Sample No.	Description	Photograph/Location
09	Brown plastic cable tie	
10	Black plastic junction box housing	
11	Black diode	
12	Black plastic plug	

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2. Tested sample description:

Sample No.	Description	Photograph/Location
13	Dark grey plastic sealing ring	
14	Black plastic sleeve	
15	Black plastic sleeve	
16	Black plastic sleeve	

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2. Tested sample description:

Sample No.	Description	Photograph/Location
17	Black plastic cable jacket	

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3. Test Data:

3.1 Testing Group and Test result

Sample ID	Test Item(s)	Result
01	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
02	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
03	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
04	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
05	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
06	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
07	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
08	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
09	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
10	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
11	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
12	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
13	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
14	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
15	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
16	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.
17	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	N.D.

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3.2 List of Perfluoroalkyl and polyfluoroalkyl substances (PFAS)

Item No.	Tested Items	MDL [mg/kg]	CAS No.
01	Perfluorooctanesulfonic acid, PFOS	0.01	1763-23-1
02	Perfluorooctanesulfonyl fluoride, PFOSF/POSF *	0.01	307-35-7
03	Potassium perfluorooctanesulfonate, PFOS-K *	0.01	2795-39-3
04	Ammonium perfluorooctanesulfonate, PFOS-NH ₄ *	0.01	29081-56-9
05	1-Decanaminium, N-decyl-N,N-dimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1), PFOS-DDA*	0.01	251099-16-8
06	Diethanolamine perfluorooctanesulfonate, PFOS-NH(CH ₂ CH ₂ OH) ₂ *	0.01	70225-14-8
07	Lithium perfluorooctanesulfonate, PFOS-Li *	0.01	29457-72-5
08	Tetraethylammonium perfluorooctanesulfonate, PFOS-N(C ₂ H ₅) ₄ *	0.01	56773-42-3
09	Tetramethylammonium perfluorooctane sulfonate, PFOS-N(CH ₃) ₄ *	0.01	56773-44-5
10	Sodium perfluorooctanesulfonate, PFOS-Na *	0.01	4021-47-0
11	Magnesium bis[heptadecafluorooctanesulphonate], PFOS-Mg *	0.01	91036-71-4
12	Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate, PFOS-Piperidine *	0.01	71463-74-6
13	Perfluorooctanesulfonate, PFOS- *	0.01	45298-90-6
14	Tetrabutylammonium perfluorooctanesulfonate, PFOS-N(butyl) ₄ *	0.01	111873-33-7
15	N,N-Dibutyl-N-methylbutan-1-aminium heptadecafluorooctane-1-sulfonate, PFOS-N(butyl) ₃ Methyl *	0.01	124472-68-0
16	N,N,N-Tripropylpentan-1-aminium heptadecafluorooctane-1-sulfonate, PFOS-NPentyl(Propyl) ₃ *	0.01	56773-56-9
17	N,N,N-Triethyldecane-1-aminium heptadecafluorooctane-1-sulfonate, PFOS-NDecyl(Ethyl) ₃ *	0.01	773895-92-4
18	Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, salt with perfluoro-1-octanesulfonic acid (1:1), PFOS-bis[4-(1,1-dimethylethyl)phenyl]-Iodonium)*	0.01	213740-80-8
19	Diphenyl(2,4,6-trimethylphenyl)sulfonium perfluoro-1-octanesulfonate, PFOS-Diphenyl(2,4,6-trimethylphenyl)sulfanium*	0.01	258341-99-0
20	1-Hexadecylpyridinium perfluoro-1-octanesulfonate, PFOS-Cetylpyridinium*	0.01	334529-63-4
21	Tetrabutylphosphonium perfluorooctane sulfonate, PFOS-Tetrabutylphosphonium*	0.01	2185049-59-4
22	Perfluorooctanesulfonic acid diethylamine salt, PFOS-diethylamine*	0.01	2205029-08-7
23	heptyldimethyl{2-[(2-methylprop-2-enoyl)oxy]ethyl}azanium heptadecafluorooctane-1-sulfonate, PFOS-Heptyl-dimethyl-[2-(2-methylprop-2-enoyloxy)ethyl]azanium*	0.01	1203998-97-3
24	Perfluorooctane sulfonic anhydride, PFOSAN*	0.01	423-92-7

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25	Perfluorooctanoic acid, PFOA	0.01	335-67-1
26	Ammonium perfluorooctanoate, APFO*	0.01	3825-26-1
27	Sodium perfluorooctanoate, PFOA-Na*	0.01	335-95-5
28	Potassium perfluorooctanoate, PFOA-K*	0.01	2395-00-8
29	Silver perfluorooctanoate, PFOA-Ag*	0.01	335-93-3
30	Perfluorooctanoyl fluoride, PFOA-F*	0.01	335-66-0
31	Perfluorooctanoate, PFOA- *	0.01	45285-51-6
32	Lithium perfluorooctanoate, PFOA-Li *	0.01	17125-58-5
33	Pentadecafluorooctanoic acid-pyridine (1/1), PFOA-Pyridine *	0.01	95658-47-2
34	Perfluorooctanoate N,N,N-trimethylmethanaminium, PFOA-Tetramethylammonium *	0.01	32609-65-7
35	Cesium perfluorooctanoate, PFOA-Ce *	0.01	17125-60-9
36	Cobalt perfluorooctanoate, PFOA-Co *	0.01	35965-01-6
37	Chromium(III) perfluorooctanoate, PFOA-Cr *	0.01	68141-02-6
38	Methyl perfluorooctanoate, Me-PFOA *	0.01	376-27-2
39	Ethyl perfluorooctanoate, Et-PFOA *	0.01	3108-24-5
40	N,N,N-Triethylethanaminium perfluorooctanoate, PFOA-N(Ethyl)4 *	0.01	98241-25-9
41	N,N,N-Trimethyloctan-1-aminium pentadecafluorooctanoate, PFOA-N(methyl)3Octyl *	0.01	927835-01-6
42	Potassium pentadecafluorooctanoate-water (1:1:2), PFOA-K-(H2O)2 *	0.01	98065-31-7
43	Perfluorooctanoic Anhydride, PFOA-Anhydride *	0.01	33496-48-9
44	Tetrapropylammonium perfluorooctanoate, PFOA-Tetrapropylammonium*	0.01	277749-00-5
45	Perfluorooctanoic acid compd. with ethanamine (1:1), PFOA-C2H7N*	0.01	1376936-03-6
46	pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1), PFOA-C10H14N2*	0.01	1514-68-7
47	Perfluorononanoic acid, PFNA	0.01	375-95-1
48	Sodium perfluorononanoate, PFNA-Na*	0.01	21049-39-8
49	Ammonium perfluorononanoate, APFN*	0.01	4149-60-4
50	Perfluorononanoate, PFNA- *	0.01	72007-68-2
51	Silver perfluorononanoate, PFNA-Ag *	0.01	7358-16-9
52	Potassium perfluorononanoate, PFNA-K *	0.01	21049-38-7
53	Lithium perfluorononanoate, PFNA-Li *	0.01	60871-92-3
54	Methanaminium perfluorononanoate, PFNA-CH3NH2 *	0.01	77032-23-6
55	Cyclohexanaminium perfluorononanoate, PFNA-C6H11NH2 *	0.01	328531-06-2
56	N,N-Diethylethanaminium heptadecafluorononanoate, PFNA-(C2H5)3N *	0.01	327176-80-7
57	Heptadecafluorononanoic acid-N-ethylethanamine (1:1), PFNA-NH(Ethyl)2 *	0.01	77032-27-0
58	Heptadecafluorononanoic acid-N-methylmethanamine (1:1), PFNA-NH(Methyl)2 *	0.01	77032-24-7
59	Piperidinium perfluorononanoate, PFNA-Piperidine *	0.01	95682-66-9
60	Heptadecafluorononanoic acid-aniline (1:1), PFNA-aniline *	0.01	95682-67-0

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61	4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium heptadecafluorononanoate, PFNA-C11H12N4O3S*	0.01	298703-33-0
62	Perfluorononanoic anhydride, PFNAA*	0.01	228407-54-3
63	Perfluorononanesulfonic acid, PFNS	0.01	68259-12-1
64	Ammonium perfluorononanesulfonate, PFNS-NH3*	0.01	17202-41-4
65	Sodium perfluorononanesulfonate, PFNS-Na*	0.01	98789-57-2
66	Perfluorononanesulfonate potassium, PFNS-K*	0.01	29359-39-5
67	Perfluorononanesulfonate, PFNS-*	0.01	474511-07-4
68	Perfluorobutanoic acid, PFBA	0.01	375-22-4
69	Sodium perfluorobutanoate, PFBA-Na*	0.01	2218-54-4
70	Silver perfluorobutanoate, PFBA-Ag *	0.01	3794-64-7
71	Perfluorobutanoate, PFBA- *	0.01	45048-62-2
72	Ammonium perfluorobutanoate, PFBA-NH3*	0.01	10495-86-0
73	Potassium perfluorobutyrate, PFBA-K *	0.01	2966-54-3
74	Lithium perfluorobutanoate, PFBA-Li *	0.01	4146-76-3
75	Calcium perfluorobutanoate, PFBA-Ca *	0.01	2366-98-5
76	Rhodium(II) heptafluorobutyrate, PFBA-Rh *	0.01	73755-28-9
77	Heptafluorobutanoic acid-piperazine (1:1), PFBA-piperazine *	0.01	375-04-2
78	4-Chlorobenzenediazonium heptafluorobutanoate - heptafluorobutanoic acid (1:1:1), (PFBA)2-4-Chlorobenzenediazonium *	0.01	630-31-9
79	Perfluorobutanesulfonic acid, PFBS	0.01	375-73-5
80	Potassium perfluorobutanesulfonate, PFBS-K*	0.01	29420-49-3
81	Perfluorobutanesulfonic acid hydrate, PFBS-H2O*	0.01	59933-66-3
82	Tetraethylazanium nonafluorobutane-1-sulfonate, PFBS-Triethylethanaminium *	0.01	25628-08-4
83	Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate, PFBS-NH4 *	0.01	68259-10-9
84	Perfluorobutanesulfonate, PFBS- *	0.01	45187-15-3
85	Tetramethylammonium perfluorobutane sulfonate, PFBS-Tetramethylammonium *	0.01	25628-17-5
86	Sodium perfluorobutylsulfonate, PFBS-Na *	0.01	60453-92-1
87	Lithium nonafluorobutanesulfonate, PFBS-Li *	0.01	131651-65-5
88	Bis(2-hydroxyethyl)ammonium perfluorobutanesulfonate, PFBS-(CH2CH2OH)2NH *	0.01	70225-18-2
89	Zinc nonafluorobutanesulphonate, PFBS-Zn *	0.01	502457-69-4
90	Magnesium nonafluorobutanesulfonate, PFBS-Mg *	0.01	507453-86-3
91	Perfluorobutanesulfonyl fluoride, PFBS-F *	0.01	375-72-4
92	Perfluorobutanesulphonyl chloride, PFBS-Cl *	0.01	2991-84-6
93	Tetrabutylammonium nonafluorobutanesulfonate, PFBS-N(Butyl)4*	0.01	108427-52-7
94	Triphenylsulfonium nonaflate, PFBS-Triphenylsulfonium*	0.01	144317-44-2
95	Diphenyliodonium nonafluorobutane-1-sulfonate, PFBS-Diphenyliodonium*	0.01	194999-82-1
96	Tris(4-tert-butylphenyl)sulfonium perfluoro-1-butanesulfonate, PFBS-Tris(4-tert-butylphenyl)sulfonium*	0.01	241806-75-7

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
97	(4-Cyclohexylphenyl)(diphenyl)sulfanium nonafluorobutane-1-sulfonate, PFBS-(4-Cyclohexylphenyl-diphenylsulfanium)*	0.01	425670-64-0
98	1-(1-Methyl-1H-indol-3-yl)thiolan-1-ium nonafluorobutane-1-sulfonate, PFBS-(1-Methyl-3-(thiolan-1-ium-1-yl)indole)*	0.01	867373-18-0
99	1-Ethyl-3-methylpyridinium perfluorobutanesulfonate, PFBS-(1-Ethyl-3-methylpyridinium)*	0.01	1015420-87-7
100	1-Methyl-3-octylimidazolium perfluorobutanesulfonate, PFBS-(1-Octyl-3-methylimidazolium)*	0.01	905972-83-0
101	1-Hexyl-3-methylimidazolium perfluorobutanesulfonate, PFBS-(1-Hexyl-3-methylimidazolium)*	0.01	1001557-05-6
102	N,N-Dimethyl-N-(propan-2-yl)propan-2-aminium nonafluorobutane-1-sulfonate, PFBS-(Dimethyl-di(propan-2-yl)azanium)*	0.01	374571-81-0
103	[4-[2-[(2-methylpropan-2-yl)oxy]-2-oxoethoxy]phenyl]-diphenylsulfanium; 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulfonate, PFBS-([4-[2-[(2-Methylpropan-2-yl)oxy]-2-oxoethoxy]phenyl]-diphenylsulfanium)*	0.01	857285-80-4
104	N,N-Dibutyl-N-methylbutan-1-aminium nonafluorobutane-1-sulfonate, PFBS-Tributylmethylammonium*	0.01	124472-66-8
105	N,N,N-Tripropylpentan-1-aminium nonafluorobutane-1-sulfonate, PFBS-(Pentyl(tripropyl)azanium)*	0.01	56773-55-8
106	Triethylammonium perfluorobutane sulfonate, PFBS-Triethylammonium*	0.01	182059-38-7
107	N-(2-Hydroxyethyl)-N,N-dimethyl-1-octanaminium perfluoro-1-butanefulfonate (1:1), PFBS-(2-Hydroxyethyl)-dimethyl-octyl-ammonium)*	0.01	334529-55-4
108	1-Hexadecylpyridinium perfluoro-1-butanefulfonate, PFBS-Cetylpyridinium*	0.01	334529-62-3
109	1-Butylpyridinium perfluoro-1-butanefulfonate, PFBS-1-Butylpyridinium*	0.01	334529-64-5
110	N-Methyl-N,N-dioctyl-1-octanaminium perfluoro-1-butanefulfonate, PFBS-Methyltricaprylammonium*	0.01	495417-51-1
111	Sulfonium, tris(4-methylphenyl)-, salt with perfluoro-1-butanefulfonic acid (1:1), PFBS-1-(Bis(4-methylphenyl)-lambda(4)-sulfanyl)-4-methylbenzene*	0.01	722538-68-3
112	Perfluoroheptanamide, PFHpA-NH2	0.1	2358-22-7
113	Perfluorobutyramide, PFBA-NH2	0.1	662-50-0
114	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	34454-97-2
115	Perfluoropentanoic acid, PFPA	0.01	2706-90-3
116	Sodium perfluorovalerate, PFPA-Na*	0.01	2706-89-0
117	Potassium perfluoropentanoate, PFPA-K*	0.01	336-23-2
118	Nonafluoropentanoic acid, ammonium salt, PFPA-NH4*	0.01	68259-11-0
119	Perfluoropentanoate, PFPA- *	0.01	45167-47-3

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
120	Silver perfluoropentanoate, PFPA-Ag *	0.01	2795-30-4
121	Lithium perfluoropentanoate, PFPA-Li *	0.01	198482-22-3
122	Nonafluoropentanoic acid -1-benzylthiourea (1:1), PFPA-C8H10N2S*	0.01	64808-55-5
123	Perfluoropentanoic anhydride, PFPA	0.01	308-28-1
124	Perfluoropentanesulfonic acid, PFPS	0.01	2706-91-4
125	Perfluoropentanesulfonate, PFPS- *	0.01	175905-36-9
126	Potassium perfluoropentane-1-sulphonate, PFPS-K *	0.01	3872-25-1
127	Ammonium 1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane-1-sulphonate, PFPS-NH4 *	0.01	68259-09-6
128	Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate, PFPS-Bis(2-hydroxyethyl)ammonium *	0.01	70225-17-1
129	Sodium perfluoropentanesulfonate, PFPS-Na *	0.01	630402-22-1
130	Triethylammonium perfluoropentane sulfonate, PFPS-Triethylammonium *	0.01	72033-42-2
131	Lithium perfluoropentane sulfonate, PFPS-Li *	0.01	1046864-81-6
132	Perfluoropentane sulfonic anhydride, PFPeSA*	0.01	161877-72-1
133	Perfluorohexanoic acid, PFHxA	0.01	307-24-4
134	Sodium perfluorohexanoate, PFHxA-Na*	0.01	2923-26-4
135	Potassium perfluorohexanoate, PFHxA-K*	0.01	3109-94-2
136	Ammonium undecafluorohexanoate, PFHxA-NH4*	0.01	21615-47-4
137	Silver perfluorohexanoate, PFHxA-Ag *	0.01	336-02-7
138	Perfluorohexanoate, PFHxA- *	0.01	92612-52-7
139	Lithium perfluorohexanoate, PFHxA-Li *	0.01	90430-61-8
140	Undecafluorohexanoic acid-piperazine (1:1), PFHxA-piperazine *	0.01	423-47-2
141	Undecafluorohexanoic acid--hexan-1-amine (1/1), PFHxA-Hexylamine *	0.01	565225-91-4
142	1-Phenylpiperazine; 2,2,3,3,4,4,5,5,6,6,6-undecafluorohexanoic acid, PFHxA-(1-Phenylpiperazine)*	0.01	985-60-4
143	Perfluorohexanoic anhydride, PFHxA-anhydride*	0.01	308-13-4
144	Perfluorohexanesulfonic acid, PFHxS	0.01	355-46-4
145	Sodium perfluorohexanesulfonate, PFHxS-Na*	0.01	82382-12-5
146	Potassium perfluorohexanesulfonate, PFHxS-K*	0.01	3871-99-6
147	Perfluorohexanesulfonate, PFHxS- *	0.01	108427-53-8
148	Triethylammonium perfluorohexane sulfonate, PFHxS-Triethylammonium *	0.01	72033-41-1
149	Tetraethylammonium perfluorohexane sulfonate, PFHxS-tetraethylammonium *	0.01	108427-55-0
150	Lithium perfluorohexanesulfonate, PFHxS-Li *	0.01	55120-77-9
151	Ammonium perfluorohexanesulfonate, PFHxS--NH4 *	0.01	68259-08-5
152	Bis(2-hydroxyethyl)ammonium perfluorohexanesulfonate, PFHxS--Bis(2-hydroxyethyl)ammonium *	0.01	70225-16-0
153	Perfluorohexanesulfonic acid, zinc salt, PFHxS-Zn *	0.01	70136-72-0
154	Perfluorohexanesulphonyl fluoride, PFHxSF *	0.01	423-50-7
155	Perfluorohexanesulfonic acid, cesium salt (1:1), PFHxS-Ce *	0.01	92011-17-1

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
156	Perfluorohexanesulfonic acid,Gallium salt(3:1), PFHxS-Ga *	0.01	341035-71-0
157	Perfluorohexanesulfonic acid,Scandium salt(3:1), PFHxS-Sc *	0.01	350836-93-0
158	Perfluorohexanesulfonic acid,Neodymium salt(3:1), PFHxS-Nd *	0.01	41184-65-0
159	Perfluorohexanesulfonic acid,yttrium salt(3:1), PFHxS-Y *	0.01	41242-12-0
160	Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1), PFHxS-BTPP*	0.01	1000597-52-3
161	Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1), PFHxS-C42H70O35*	0.01	1329995-45-0
162	Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1), PFHxS-C48H80O40*	0.01	1329995-69-8
163	N,N,N-Tributylbutan-1-aminium tridecafluorohexane-1-sulfonate, PFHxS-Dibutyl(dipropyl)azanium*	0.01	108427-54-9
164	Tridecafluorohexane-1-sulfonic acidpyrrolidine, PFHxS-Pyrrolidine*	0.01	1187817-57-7
165	4-[[4-(Diethylamino)phenyl][4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-diethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate, PFHxS-4-[[4-(diethylamino)phenyl]-(4-ethyliminonaphthalen-1-ylidene)methyl]-N,N-diethylaniline)*	0.01	1310480-24-0
166	4-[[4-(Dimethylamino)phenyl][4-(ethylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate, PFHxS-4-[[4-(dimethylamino)phenyl]-(4-ethyliminonaphthalen-1-ylidene)methyl]-N,N-dimethylaniline)*	0.01	1310480-27-3
167	4-[[4-(Dimethylamino)phenyl][4-(phenylamino)naphthalen-1-yl]methylidene]-N,N-dimethylcyclohexa-2,5-dien-1-iminium tridecafluorohexane-1-sulfonate, PFHxS-4-[[4-(dimethylamino)phenyl]-(4-phenyliminonaphthalen-1-ylidene)methyl]-N,N-dimethylaniline)*	0.01	1310480-28-4
168	Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1), TPS-PFHxS*	0.01	144116-10-9
169	Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1), PFHxS-C44H37N2O2*	0.01	1462414-59-0
170	Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1), PFHxS-I(C6H5)2*	0.01	153443-35-7

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
191	Potassium perfluoroheptanoate, PFHpA-K*	0.01	21049-36-5
192	Ammonium perfluoroheptanoate, PFHpA-NH3*	0.01	6130-43-4
193	Silver perfluoroheptanoate, PFHpA-Ag*	0.01	424-05-5
194	Lithium perfluoroheptanoate, PFHpA-Li*	0.01	60871-90-1
195	Perfluoroheptanoate, PFHpA-*	0.01	120885-29-2
196	Cesium perfluoroheptanoate, PFHpA-Ce*	0.01	171198-24-6
197	Perfluoroheptanesulfonic acid, PFHpS	0.01	375-92-8
198	Sodium perfluoroheptane sulfonate, PFHpS-Na*	0.01	21934-50-9
199	Potassium perfluoroheptanesulfonate, PFHpS-K*	0.01	60270-55-5
200	Perfluoroheptanesulfonate, PFHpS- *	0.01	146689-46-5
201	Lithium perfluoroheptanesulfonate, PFHpS-Li *	0.01	117806-54-9
202	Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate, PFHpS-Bis(2-hydroxyethyl)ammonium *	0.01	70225-15-9
203	Ammonium perfluoroheptanesulfonate, PFHpS-NH4 *	0.01	68259-07-4
204	Triethylammonium perfluoroheptane sulfonate, PFHpS-Triethylammonium *	0.01	72033-40-0
205	Tetraethylammonium perfluoroheptane sulfonate, PFHpS-Tetraethylammonium*	0.01	439863-97-5
206	Perfluoroheptane sulfonic anhydride, PFHpSA*	0.01	140429-92-1
207	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonic acid, 6:2 FTSA or H4PFOS6:2	0.01	27619-97-2
208	6:2 Fluorotelomer sulfonate sodium salt, 6:2 FTS-Na *	0.01	27619-94-9
209	6:2 Fluorotelomer sulfonate barium salt, 6:2 FTS-Ba *	0.01	1807944-82-6
210	Potassium 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctanesulphonate, 6:2 FTS-K *	0.01	59587-38-1
211	3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctane-1-sulfonate, 6:2 FTS ion *	0.01	425670-75-3
212	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanesulfonic Acid Ammonium Salt, 6:2 FTS-NH4 *	0.01	59587-39-2
213	Perfluorodecanoic acid, PFDA	0.01	335-76-2
214	Sodium Perfluorodecanoate, PFDA-Na *	0.01	3830-45-3
215	Ammonium perfluorodecanoate, APFDA *	0.01	3108-42-7
216	Nonadecafluorodecanoate, PFDA- *	0.01	73829-36-4
217	Potassium perfluorodecanoate, PFDA-K *	0.01	51604-85-4
218	Lithium perfluorodecanoate, PFDA-Li *	0.01	84743-32-8
219	Silver perfluorodecanoate, PFDA-Ag *	0.01	5784-82-7
220	Nonadecafluorodecanoic anhydride, Perfluorodecanoic anhydride (PFDA)*	0.01	942199-24-8
221	Perfluoropropionic acid, PFPrA	0.01	422-64-0
222	Perfluorodecanesulfonate, PFDS- *	0.01	126105-34-8
223	Sodium perfluorodecanesulfonate, PFDS-Na *	0.01	2806-15-7
224	Perfluorodecanesulfonate potassium, PFDS-K *	0.01	2806-16-8
225	Perfluorodecanesulfonic acid ammonium salt, PFDS-NH4 *	0.01	67906-42-7
226	Perfluorodecane sulfonic anhydride, Perfluorodecane sulfonic anhydride (PFDSA)*	0.01	51667-62-0
227	Perfluoro-3,7-dimethyloctanoic acid, PF-3,7-DMOA	0.01	172155-07-6
228	Sodium pentafluoropropionate*, PFPrA-Na *	0.01	378-77-8

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229	Potassium pentafluoropropionate*, PFPrA-K *	0.01	378-76-7
230	Silver perfluoropropanoate, PFPrA-Ag *	0.01	509-09-1
231	Perfluoropropanoate, PFPrA- *	0.01	44864-55-3
232	Ammonium pentafluoropropionate, PFPrA-NH4 *	0.01	2730-58-7
233	2H,2H,3H,3H-Perfluoroundecanoic acid, 8:3 FTCA	0.01	34598-33-9
234	Perfluorooctanesulfonamide, PFOSA	0.01	754-91-6
235	Potassium 1H,1H,2H,2H-perfluoroundecanoate, 8:3 FTCA-K *	0.01	83310-58-1
236	Lithium 3-(perfluorooctyl)propanoate, 8:3 FTCA-Li *	0.01	67304-23-8
237	N-methylperfluorooctanesulfonamide, MeFOSA	0.01	31506-32-8
238	Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1), PFOSA-triethylamine *	0.01	76752-82-4
239	Perfluorooctanesulfonamide lithium salt (1:1), PFOSA-Li *	0.01	76752-79-9
240	Perfluorooctanesulfonamide sodium salt (1:1), PFOSA-Na *	0.01	76752-78-8
241	Perfluorooctanesulfonamide ammonium salt (1:1), PFOSA-NH3 *	0.01	76752-72-2
242	Perfluorooctanesulfonamide potassium salt (1:1), PFOSA-K *	0.01	76752-70-0
243	N-Ethylperfluorooctanesulfonamide, EtFOSA	0.01	4151-50-2
244	N-Methylperfluorooctanesulfonamidoethanol, MeFOSE	0.01	24448-09-7
245	N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide, EtFOSE	0.01	1691-99-2
246	Perfluoroundecanoic acid, PFUnA	0.01	2058-94-8
247	Perfluorododecanoic acid, PFDoA	0.01	307-55-1
248	Perfluoroundecanoate, PFUnA- *	0.01	196859-54-8
249	Sodium perfluoroundecanoate, PFUnA-Na *	0.01	60871-96-7
250	Potassium perfluoroundecanoate, PFUnA-K *	0.01	30377-53-8
251	Ammonium perfluoroundecanoate, PFUnA-NH4 *	0.01	4234-23-5
252	Calcium perfluoroundecanoate, PFUnA-Ca *	0.01	97163-17-2
253	Perfluorodecanesulfonic acid, PFDS	0.01	335-77-3
254	Ammonium perfluorododecanoate, PFDoA-NH4 *	0.01	3793-74-6
255	Perfluorododecanoate, PFDoA- *	0.01	171978-95-3
256	Sodium Perfluorododecanoate, PFDoA-Na *	0.01	60872-01-7
257	Perfluorotridecanoic acid, PFTrA	0.01	72629-94-8
258	Perfluorotridecanoate, PFTrA- *	0.01	862374-87-6
259	Ammonium perfluorotridecanoate, PFTrA-NH4 *	0.01	4288-72-6
260	Perfluorotetradecanoic acid, PFTeA	0.01	376-06-7
261	Perfluorotetradecanoate, PFTeA- *	0.01	365971-87-5
262	1H,1H,2H,2H-perfluorohexane sulfonate acid, 4:2 FTS	0.01	757124-72-4
263	4:2 Fluorotelomer sulfonate, 4:2 FTS- *	0.01	414911-30-1
264	Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate, 4:2 FTS-Na *	0.01	27619-93-8
265	1H,1H,2H,2H-Perfluorodecanesulfonic acid, 8:2FTS	0.01	39108-34-4
266	2-(Perfluorooctyl)ethane-1-sulfonate, 8:2FTS- *	0.01	481071-78-7
267	8:2 Fluorotelomer sulfonate ammonium salt, 8:2FTS-NH4 *	0.01	149724-40-3

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268	1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium, 8:2FTS-Na *	0.01	27619-96-1
269	Potassium 2-(perfluorooctyl)ethane-1-sulfonate, 8:2FTS-K *	0.01	438237-73-1
270	1H,1H,2H,2H-Perfluorododecane sulfonic acid, 10:2 FTS	0.01	120226-60-0
271	1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium, 10:2 FTS-Na *	0.01	108026-35-3
272	Perfluorooctadecanoic acid, PFODA	0.01	16517-11-6
273	Perfluorooctadecanoate anion, PFODA- *	0.01	798556-82-8
274	Perfluorohexadecanoic acid, PFHxDA	0.01	67905-19-5
275	Hentriacontafluorohexadecanoate anion, PFHxDA- *	0.01	1214264-30-8
276	2H,2H Perfluorodecane Acid, H2PFDA /8:2 FTCA	0.01	27854-31-5
277	Tetrabutylphosphonium 2H,2H-Perfluorodecanoate, 8:2 FTCA-P(C4H9)4 *	0.01	882489-14-7
278	N-methylperfluorooctane sulfonamidoacetic acid, N-MeFOSAA	0.01	2355-31-9
279	N-(Heptadecafluorooctylsulfonyl)-N-methylglycine potassium salt, N-MeFOSAA-K *	0.01	70281-93-5
280	2-(N-Methylperfluorooctanesulfonamido)acetate, N-MeFOSAA- *	0.01	909405-48-7
281	N-ethylperfluorooctane sulfonamidoacetic acid, N-EtFOSAA	0.01	2991-50-6/1336-61-4
282	Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate, N-EtFOSAA-NH4 *	0.01	2991-52-8
283	2-(N-Ethyl-perfluorooctanesulfonamido)acetate, N-EtFOSAA- *	0.01	909405-49-8
284	Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate, N-EtFOSAA-Na *	0.01	3871-50-9
285	potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate, N-EtFOSAA-K *	0.01	2991-51-7
286	8:2 Fluorotelomer phosphate diester, 8:2diPAP	0.01	678-41-1
287	Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate, 8:2diPAP-Na *	0.01	114519-85-6
288	8:2 Fluorotelomer phosphate diester ion (1-), 8:2diPAP- *	0.01	1411713-91-1
289	Ammonium bis(1H,1H,2H,2H-perfluorodecyl)phosphate, 8:2diPAP-NH3 *	0.01	93776-20-6
290	8:2 Fluorotelomer phosphate diester, Diethanolamine(1:1), 8:2diPAP-diethanolamine *	0.01	57677-97-1
291	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoic acid, HFPO-DA	0.01	13252-13-6
292	Triethylaminium perfluoro-2-propoxypropanoate, HFPO-DA-(C2H5)3N *	0.01	165951-18-8
293	2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid-N-propylpropan-1-amine (1:1), HFPO-DA-Di-n-propylamine *	0.01	165951-17-7

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Dated 2025-08-29



Item No.	Tested Items	MDL [mg/kg]	CAS No.
294	Potassium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-K *	0.01	67118-55-2
295	Ammonium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-NH3 *	0.01	62037-80-3
296	sodium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-Na *	0.01	67963-75-1
297	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA- *	0.01	122499-17-6
298	2,3,3,3-Tetrafluoro-2-(perfluoropropoxy)propanoyl fluoride, HFPO-DA-F *	0.01	2062-98-8
299	2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid, HFPO-DA-Me*	0.01	13140-34-6
300	Ethyl 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-Et*	0.01	79851-29-9
301	2-(Heptafluoropropoxy)-2,3,3,3-tetrafluoropropionic acid, HFPO-DA-propyl*	0.01	147224-16-6
302	propan-2-yl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-isopropyl*	0.01	147224-17-7
303	prop-2-enyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-CH2-CH=CH2*	0.01	84123-65-9
304	butyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-butyl*	0.01	147224-18-8
305	2-methoxyethyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-2-methoxyethyl*	0.01	340034-67-5
306	2-methylpropyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-2-methylpropyl*	0.01	183873-54-3
307	butan-2-yl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-isobutyl*	0.01	340034-57-3
308	trimethylsilyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-Si(Me)3*	0.01	152718-74-6
309	Pentyl 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-Pentyl *	0.01	183873-55-4
310	3-methylbutyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-3-Methylbutyl*	0.01	183873-56-5
311	hexyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-hexyl *	0.01	183873-57-6
312	2-ethylhexyl 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoate, HFPO-DA-2-ethylhexyl*	0.01	340034-61-9
313	Benzyl 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-Benzyl*	0.01	147224-19-9
314	Cyclohexyl 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA-Cyclohexyl *	0.01	78755-41-6
315	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (+)-, HFPO-DA, (+)- *	0.01	75579-39-4

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
316	Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, (-)-, HFPO-DA, Sulfamethoxypyridazine*	0.01	75579-40-7
317	4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate, HFPO-DA, Sulfamethoxypyridazine *	0.01	298703-31-8
318	2,3,6-Triiodobenzoic acid (1-methyl-3-piperidiny)methyl ester compd. with perfluoro-2-(propoxy)propanoate (1:1), HFPO-DA-C14H16I3NO2*	0.01	2412106-69-3
319	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-methyl-, N-Me-FHxSA	0.01	68259-15-4
320	1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, PFHxSA	0.01	41997-13-1
321	Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid, HFPO-TA	0.01	13252-14-7
322	Propanoic acid, 2,3,3,3-tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propoxy]-, potassium salt, HFPO-TA-K*	0.01	67118-57-4
323	Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid, sodium salt, HFPO-TA-Na*	0.01	67963-76-2
324	Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy)-, ammonium salt, HFPO-TA-NH4*	0.01	13043-05-5
325	Perfluoro(2,5-dimethyl-3,6-dioxanonanoyl) fluoride, HFPO-TA-F*	0.01	2641-34-1
326	2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]propanoic acid--N-methylmethanamine (1/1), HFPO-TA-N-methylmethanamine *	0.01	328065-54-9
327	Triethylaminium perfluoro-2-(2-propoxypropoxy)propanoate, HFPO-TA-Triethylaminium *	0.01	165951-19-9
328	Methanaminium perfluoro-2-(2-propoxypropoxy)propanoate, HFPO-TA-Methanaminium *	0.01	328065-29-8
329	Trifluoroacetic Acid, TFA	0.01	76-05-1
330	Sodium trifluoroacetate, TFA-Na*	0.01	2923-18-4
331	Thallium(III) trifluoroacetate, TFA-Tl*	0.01	23586-53-0
332	Lithium Trifluoroacetate, TFA-Li*	0.01	2923-17-3
333	Silver trifluoroacetate, TFA-Ag*	0.01	2966-50-9
334	Cesium Trifluoroacetate, TFA-Cs*	0.01	21907-50-6
335	Potassium trifluoroacetate, TFA-K*	0.01	2923-16-2
336	Ammonium trifluoroacetate, TFA-NH4*	0.01	3336-58-1
337	Mercury(II) trifluoroacetate, TFA-Hg*	0.01	13257-51-7
338	Palladium(II) trifluoroacetate, TFA-Pd*	0.01	42196-31-6
339	Trifluoroacetate / Trifluoroacetic acid anion, TFAanion*	0.01	14477-72-6
340	Dimethyl[(trifluoroacetyl)oxy]sulfanium, TFA-Trifluoroacetyloxydimethylsulfonium*	0.01	57738-66-6

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
341	Aluminium tris(trifluoroacetate), TFA-Al*	0.01	36554-89-9
342	Barium trifluoroacetate, TFA-Ba*	0.01	2992-78-1
343	Indium hydroxide trifluoroacetate (1/1/2), TFA-InOH*	0.01	66027-94-9
344	Erbium tris(trifluoroacetate), TFA-Er*	0.01	70236-99-6
345	Indium trifluoroacetate, TFA-In*	0.01	36554-90-2
346	Lanthanum tris(trifluoroacetate), TFA-La*	0.01	70236-92-9
347	Nickel(2+) trifluoroacetate, TFA-Ni*	0.01	16083-14-0
348	Lead(II) trifluoroacetate, TFA-Pb*	0.01	4146-73-0
349	Acetic acid, trifluoro-, rhodium(2+) salt, TFA-Rh*	0.01	72654-51-4
350	Thulium tris(trifluoroacetate), TFA-Tm*	0.01	70237-00-2
351	Ytterbium(3+) tris(trifluoroacetate), TFA-Yb*	0.01	87863-62-5
352	Zinc bis(trifluoroacetate), TFA-Zn*	0.01	21907-47-1
353	Ruthenium(II) 2,2,2-trifluoroacetate, TFA-Ru*	0.01	61604-32-8
354	Magnesium 2,2,2-trifluoroacetate, TFA-Mg*	0.01	123333-72-2
355	Copper;2,2,2-trifluoroacetic acid, (TFA)2-Cu*	0.01	16712-25-7
356	Copper (II) Trifluoroacetate, TFA-Cu*	0.01	123333-88-0
357	2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosaflluoroundecanoic acid, 11H-PFUA	0.01	1765-48-6
358	Potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosaflluoroundecanoate, 11H-PFUA-K*	0.01	307-71-1
359	Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-icosaflluoroundecanoate, 11H-PFUA-ammonia*	0.01	5081-02-7
360	Perfluoroazelaic acid, PFAA	0.01	23453-64-7
361	Dimethyl perfluoroazelate, Dimethyl-PFAA*	0.01	22116-90-1
362	Perfluorosebacic acid, PFSA	0.01	307-78-8
363	2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-Hexadecafluoro-10-methoxy-10-oxodecanoic acid, methyl-PFSA*	0.01	/
364	Dimethyl hexadecafluorodecanedioate, Dimethyl-PFSA*	0.01	4590-24-3
365	Perfluoro-1,10-decanedicarboxylic acid, PFDDCA	0.01	865-85-0
366	Dimethyl perfluoro-1,10-decanedicarboxylate, Dimethyl-PFDDCA*	0.01	84750-88-9
367	Perfluorooctane sulfonamidoacetic acid, FOSAA	0.01	2806-24-8
368	N-[(Perfluorooctyl)sulfonyl]glycinate, FOSAA-*	0.01	909405-47-6
369	N-[(Perfluorooctyl)sulfonyl]glycine potassium salt (1:1), FOSAA-K*	0.01	75260-69-4
370	N-[(Perfluorooctyl)sulfonyl]glycine sodium salt (1:1), FOSAA-Na*	0.01	115716-87-5
371	4,4,5,5,6,6,6-heptafluorohexanoic Acid, HFHA	0.01	356-02-5
372	4,4,5,5,6,6,6-Heptafluoro-1-hexene-1,1-diol, HFHD*	0.01	/
373	2-(2,2,3,3,4,4,4-heptafluorobutyl)butanedioic Acid, HFHA-CH2COOH*	0.01	121223-84-5
374	Ethyl 4,4,5,5,6,6,6-heptafluorohexanoate, HFHA-Ethyl*	0.01	424-66-8
375	Methyl 4,4,5,5,6,6,6-heptafluorohexanoate, HFHA-Methyl*	0.01	2070-60-2
376	4,4,5,5,6,6,6-Heptafluoronorleucine, 2-amino-HFHA*	0.01	15960-01-7

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
377	4,4,5,5,6,6,6-Heptafluoro-L-norleucine, (2S)-2-amino-HFHA*	0.01	148043-94-1
378	3-Amino-4,4,5,5,6,6,6-heptafluorohexanoic acid, 3-amino-HFHA*	0.01	150618-42-1
379	3,3'-Sulfanediybis(4,4,5,5,6,6,6-heptafluorohexanoic acid), (HFHA)2S*	0.01	312-14-1
380	3-[(Carboxymethyl)sulfanyl]-4,4,5,5,6,6,6-heptafluorohexanoic acid, 3-(carboxymethylsulfanyl)-HFHA*	0.01	424-55-5
381	4,4,5,5,6,6,6-Heptafluoro-3-(nitromethyl)hexanoic acid, 3-(nitromethyl)-HFHA*	0.01	7079-86-9
382	Bisperfluorooctyl phosphate, 6:2 diPAP	0.01	57677-95-9
383	Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) phosphate ion(1-), 6:2 diPAP-*	0.01	667465-18-1
384	Sodium bis[2-(perfluorohexyl)ethyl] phosphate, 6:2 diPAP-Na*	0.01	407582-79-0
385	Bis(tridecafluorohexyl)phosphinic acid, 6:6 PFPi	0.01	40143-77-9
386	Bis(perfluorohexyl)phosphinic acid sodium salt, 6:6 PFPi-Na*	0.01	70609-44-8
387	Bis(perfluorohexyl) phosphinic acid erbium(3+) salt, (6:6 PFPi)3-Er*	0.01	500776-73-8
388	Bis(perfluorohexyl) phosphinic acid ytterbium(3+) salt, (6:6 PFPi)3-Yb*	0.01	500776-72-7
389	1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-(((3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl)amino)-, inner salt, 6:2 FTAB	0.01	34455-29-3
390	1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-(methyl((3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl)amino)-, inner salt, 6:2 FTAB-methyl*	0.01	66008-71-7
391	Perfluorohexane sulfonamido amine, PFHxSA	0.01	50598-28-2
392	N-(3-(Dimethylamino)propyl)tridecafluorohexanesulphonamide monohydrochloride, PFHxSA-HCl*	0.01	68957-61-9
393	perfluorohexanesulfonamido amine carboxylic acid B, n=6, PFHxSA-β-alanine*	0.01	141607-32-1
394	Perfluorohexane sulfonamido betaine disulfonate, PFHxSA-betaine disulfonate**	0.01	2089108-80-3
395	N-Carboxymethyldimethylammoniopropyl-perfluorohexanesulfonamide, N-Carboxymethyldimethylammoniopropyl-PFHxSA*	0.01	2089109-24-8
396	N-sulfopropyl (hydroxyethyl methyl) ammonio propylperfluorohexane sulfonamide, N-sulfopropyl (hydroxyethyl methyl) ammonio-PFHxSA*	0.01	2089108-76-7
397	perfluorohexane sulfonamido betaine propyl 2-hydroxy sulfonate, PFHxSA-betaine propyl 2-hydroxy sulfonate*	0.01	2089108-73-4

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
398	N-hydroxyethyl dimethylammonio propyl perfluorohexanesulfonamide, N-hydroxyethyl dimethylammonio propyl-PFHxSA*	0.01	736877-37-5
399	N-dihydroxybutyl dimethylammonio propyl perfluorohexane sulfonamide, N-dihydroxybutyl dimethylammonio propyl-PFHxSA*	0.01	2089109-95-3
400	3-[(Perfluorohexane-1-sulfonyl)amino]-N,N-dimethylpropan-1-amine N-oxide potassium salt, PFHxSA-oxide-K*	0.01	178094-71-8
401	Perfluorohexane sulfonamido amine oxide, PFHxSA-oxide*	0.01	30295-56-8
402	1-Hexanesulfonamide, N-(3-(dimethylamino)propyl)-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, monoacetate, PFHxSA-monoacetate*	0.01	73772-33-5
403	Sodium 3-(methyl(3-(((tridecafluorohexyl)sulphonyl)amino)propyl)amino)propanesulphonate, N(1-Propanesulfonic acid)-PFHxSA-Na*	0.01	80621-17-6
404	1-Propanaminium, N,N,N-trimethyl-3-(((tridecafluorohexyl)sulfonyl)amino)-, sulfate (2:1), (PFHxSA) ₂ SO ₄ *	0.01	70248-52-1
405	Bis(trifluoromethane)sulfonimide, TFSI	0.01	82113-65-3
406	Tributylmethylammonium Bis(trifluoromethanesulfonyl)imide, TFSI-TBMA*	0.01	405514-94-5
407	Zinc(II) bis(trifluoromethanesulfonyl)imide, (TFSI) ₂ -Zn*	0.01	168106-25-0
408	Manganese(II) Bis(trifluoromethanesulfonyl)imide, (TFSI) ₂ -Mg*	0.01	207861-55-0
409	Cesium(I) Bis(trifluoromethanesulfonyl)imide, TFSI-Se*	0.01	91742-16-4
410	Nickel(II) bis(trifluoromethanesulfonimide) hydrate, (TFSI) ₂ -Ni-H ₂ O*	0.01	2067359-93-5
411	Copper(II) Bis(trifluoromethanesulfonyl)imide, (TFSI) ₂ -Cu*	0.01	162715-14-2
412	Iron, tris[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl-kO]methanesulfonamidato-kO]-, (TFSI) ₃ -Fe*	0.01	207861-59-4
413	Copper(II) trifluoromethanesulfonimide xhydrate, (TFSI) ₂ -CuH ₂ O*	0.01	1334406-76-6
414	Silver bis(trifluoromethanesulfonyl)imide, TFSI-Ag*	0.01	189114-61-2
415	Copper bis(trifluoromethylsulfonyl)imide, TFSI-Cu*	0.01	291300-50-0
416	Barium bis(trifluoromethanesulfonimide), (TFSI) ₂ -Ba*	0.01	168106-22-7
417	Strontium bis(trifluoromethylsulfonyl)imide, (TFSI) ₂ -Sr*	0.01	862121-57-1
418	1-Methylimidazole Bis(trifluoromethanesulfonyl)imide, TFSI-(1-Methylimidazolium)*	0.01	353239-08-4
419	1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-1-Ethyl-3-methylimidazolium*	0.01	174899-82-2

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Report No. 48.400.25.0796.01-00/04

Dated 2025-08-29



Item No.	Tested Items	MDL [mg/kg]	CAS No.
420	1,2-Dimethyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-2,3-Dimethyl-1-propyl-1H-imidazol-3-ium*	0.01	169051-76-7
421	Magnesium bis(trifluoromethylsulfonyl)imide, TFSI-Mg*	0.01	133395-16-1
422	1-Methyl-3-propylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-1-Propyl-3-methylimidazolium hexafluorophosphate*	0.01	216299-72-8
423	1-Decyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Decyl-3-methylimidazolium*	0.01	433337-23-6
424	1-Butyl-1-methylpiperidinium bis(trifluoromethylsulfonyl)imide, TFSI-1-Butyl-1-methylpiperidin-1-ium*	0.01	623580-02-9
425	1-Methyl-3-n-octylimidazolium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Octyl-3-methylimidazolium*	0.01	178631-04-4
426	Tris[bis(trifluoromethylsulfonyl)amino] ytterbium, (TFSI)3-Yb*	0.01	175438-43-4
427	Butyltrimethylammonium bis(trifluoromethylsulfonyl)imide, TFSI-N,N,N-Trimethylbutan-1-aminium*	0.01	258273-75-5
428	Cobalt bis(trifluoromethylsulfonyl)imide, (TFSI)2-Co*	0.01	207861-61-8
429	Potassium Bis(trifluoromethanesulfonyl)imide, TFSI-K*	0.01	90076-67-8
430	Lithium bis((trifluoromethyl)sulfonyl)azanide, TFSI-Li*	0.01	90076-65-6
431	Scandium(III) trifluoromethanesulfonimide, (TFSI)3-Sc*	0.01	176726-07-1
432	1-Hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-1-Hexyl-3-methylimidazolium*	0.01	382150-50-7
433	1-Butyl-1-methylpyrrolidinium bistriflimide, TFSI-1-Butyl-1-methylpyrrolidinium*	0.01	223437-11-4
434	Sodium bis(trifluoromethanesulfonyl)imide, TFSI-Na*	0.01	91742-21-1
435	Phosphonium, trihexyltetradecyl-, salt with 1,1,1-trifluoro-N-((trifluoromethyl)sulfonyl)methanesulfonamide (1:1), TFSI-Trihexyl(tetradecyl)phosphonium*	0.01	460092-03-9
436	1-Butyl-2,3-dimethylimidazolium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Butyl-2,3-dimethylimidazolium*	0.01	350493-08-2
437	1-Butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-1-butyl-3-methyl-1H-imidazol-3-ium*	0.01	174899-83-3
438	1-Methyl-3-tetradecylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-1-Tetradecyl-3-methylimidazolium*	0.01	404001-49-6
439	Iron(II) tris(trifluoromethylsulfonyl)imide, (TFSI)2-Fe*	0.01	207861-57-2
440	1-Hexadecyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide, TFSI-3-hexadecyl-1-methyl-1H-imidazol-3-ium*	0.01	404001-50-9

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
441	Tetramethylammonium bis(trifluoromethanesulfonyl)imide, TFSI-Tetramethylammonium*	0.01	161401-25-8
442	Lanthanum(III) Bis(trifluoromethanesulfonyl)imide, (TFSI)3-La*	0.01	168106-26-1
443	Nickel bis(trifluoromethylsulfonyl)imide, (TFSI)2-Ni*	0.01	207861-63-0
444	Methyltricaprylammonium bistriflamide, TFSI-Methyltricaprylammonium*	0.01	375395-33-8
445	1-Methyl-1-propylpiperidin-1-ium Bis((trifluoromethyl)sulfonyl)amide, TFSI-1-Methyl-1-propylpiperidin-1-ium*	0.01	608140-12-1
446	1-Ethyl-2,3-dimethylimidazolium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Ethyl-2,3-dimethylimidazolium*	0.01	174899-90-2
447	1-Methyl-1-propylpyrrolidinium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Methyl-1-propylpyrrolidinium*	0.01	223437-05-6
448	1,1,1-trifluoro-N-trifluoromethanesulfonyl-N-((N-trifluoromethanesulfonyltrifluoromethanesulfonamido)c alcio)methanesulfonamide, (TFSI)2-Ca*	0.01	165324-09-4
449	Choline bis(trifluoromethylsulfonyl)imide, TFSI-Choline*	0.01	827027-25-8
450	1-Dodecyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)imide, TFSI-1-Dodecyl-3-methylimidazolium*	0.01	404001-48-5
451	1-Ethyl-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide, TFSI-1-Ethyl-1-methylpyrrolidinium*	0.01	223436-99-5
452	Diethylmethylsulfonium bis(trifluoromethylsulfonyl)imide, TFSI-Diethyl(methyl)sulfonium*	0.01	792188-85-3
453	Bis(trifluoromethylsulfonyl)azanide;mercury(2+), (TFSI)2-Hg*	0.01	104715-41-5
454	Trimethylsulfonium bis(trifluoromethylsulfonyl)imid, >98%, TFSI-Trimethylsulfonium*	0.01	321746-48-9
455	Trifluoromethanesulfonic acid, TMFS	0.01	1493-13-6
456	Trifluoromethane sulfonic acid Sodium salt, TFMS-Na*	0.01	2926-30-9
457	Silver trifluoromethanesulfonate, TFMS-Ag*	0.01	2923-28-6
458	Zinc trifluoromethanesulfonate, TFMS-Zn*	0.01	54010-75-2
459	Scandium trifluoromethanesulfonate, TFMS-Sc*	0.01	144026-79-9
460	Trifluoromethanesulfonic anhydride, TFMS-anhydride*	0.01	358-23-6
461	Lithium trifluoromethanesulfonate, TFMS-Li*	0.01	33454-82-9
462	Copper(II) trifluoromethanesulfonate, TFMS-Cu*	0.01	34946-82-2
463	Barium trifluoromethanesulfonate, TFMS-Ba*	0.01	2794-60-7
464	Cerium(IV) trifluoromethanesulfonate, TFMS-Ce*	0.01	107792-63-2
465	Magnesium trifluoromethanesulfonate, TFMS-Mg*	0.01	60871-83-2
466	Potassium trifluoromethanesulfonate, TFMS-K*	0.01	2926-27-4
467	Nickel(II) Trifluoromethanesulfonate, TFMS-Ni*	0.01	60871-84-3
468	Tin(II) trifluoromethanesulfonate, TFMS-Sn*	0.01	62086-04-8

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
469	Yttrium(III) trifluoromethanesulfonate, TFMS-Y*	0.01	52093-30-8
470	Iron(III) trifluoromethanesulfonate, TFMS-Fe*	0.01	63295-48-7
471	Cerium(III) Trifluoromethanesulfonate, TFMS-Ce*	0.01	76089-77-5
472	Tetrabutylammonium trifluoromethanesulfonate, TFMS-Tetrabutylammonium*	0.01	35895-70-6
473	Methyltrioctylammonium trifluoromethanesulfonate, TFMS-Methyltricaprylammonium*	0.01	121107-18-4
474	Imidazole trifluoromethanesulfonate, TFMS-Imidazole*	0.01	29727-06-8
475	Trifluoroacetyl Trifluoromethanesulfonate, TFMS-Trifluoroacetyl*	0.01	68602-57-3
476	Lanthanum(III) trifluoromethanesulfonate, TFMS-La*	0.01	52093-26-2
477	Indium(III) trifluoromethanesulfonate, TFMS-In*	0.01	128008-30-0
478	Samarium(III) trifluoromethanesulfonate, TFMS-Sm*	0.01	52093-28-4
479	Ytterbium(III) trifluoromethanesulfonate, TFMS-Yb*	0.01	54761-04-5
480	Thulium(III) trifluoromethanesulfonate, TFMS-Tm*	0.01	141478-68-4
481	Tetraethylammonium trifluoromethanesulfonate, TFMS-Tetraethylammonium*	0.01	35895-69-3
482	1-Fluoro-3,5-dichloropyridinium triflate, TFMS-3,5-Dichloro-1-fluoropyridin-1-ium*	0.01	107264-06-2
483	Triethylamine salt of trifluoromethanesulfonic acid, TFMS-Triethylamine*	0.01	646-58-2
484	Triphenylphosphonium anhydride triflate, TFMS-Triphenylphosphinoxide*	0.01	72450-51-2
485	N,N-Diethyl-6-(diethylamino)-9-(2-(methoxycarbonyl)phenyl)-3H-xanthene-3-ylideneammonium trifluoromethanesulfonate, TFMS-Xanthylum, 3,6-bis(diethylamino)-9-(2-(methoxycarbonyl)phenyl)-*	0.01	120611-30-5
486	Diphenylammonium Trifluoromethanesulfonate, TFMS-Diphenylamine*	0.01	164411-06-7
487	1-(3-aminoazetidin-1-yl)prop-2-en-1-one, trifluoromethanesulfonic acid, TFMS-1-(3-Aminoazetidin-1-yl)prop-2-en-1-one*	0.01	2060047-56-3
488	Guanidine trifluoromethanesulfonic acid, TFMS-Guanidine*	0.01	153756-25-3
489	Trifluoromethanesulfonic acid--1-ethyl-1H-imidazole (1/1), TFMS-1-Ethyl-1H-imidazole*	0.01	501693-46-5
490	Ruthenium(3+), (OC-6-22)-, salt with trifluoromethanesulfonic acid (1:3), TFMS-Ru-H2O-NH3*	0.01	74468-24-9
491	O-Pivaloylhydroxylamine trifluoromethanesulfonate, TFMS-Amino 2,2-dimethylpropanoate*	0.01	1293990-73-4
492	Trifluoromethanesulfonyl chloride, TFMS-Cl*	0.01	421-83-0
493	(2-Pyridylmethyl)sulfonyl chloride triflate, TFMS-Pyridin-2-ylmethanesulfonyl Chloride*	0.01	882564-09-2
494	Trifluoromethanesulfonyl bromide, TFMS-Br*	0.01	15458-53-4
495	Mercury(II) trifluoromethanesulfonate, TFMS-Hg*	0.01	49540-00-3
496	Dysprosium(III) tris(trifluoromethanesulfonate), TFMS-Dy*	0.01	139177-62-1
497	Manganese bis(trifluoromethanesulfonate), TFMS-Mn*	0.01	55120-76-8

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
498	Pentaammine(trifluoromethanesulfonato)osmium(III) triflate, (TFMS)3-Os-(NH3)5*	0.01	83781-30-0
499	Lutetium(III) trifluoromethanesulfonate, TFMS-Lu*	0.01	126857-69-0
500	Terbium(III) trifluoromethanesulfonate, TFMS-Tb*	0.01	148980-31-8
501	Neodymium(III) trifluoromethanesulfonate, TFMS-Nd*	0.01	34622-08-7
502	Ammonium trifluoromethanesulfonate, TFMS-NH4*	0.01	38542-94-8
503	Holmium(III) trifluoromethanesulfonate, TFMS-Ho*	0.01	139177-63-2
504	Trifluoromethanesulfonate, TFMS-*	0.01	37181-39-8
505	Praseodymium(III) trifluoromethanesulfonate, TFMS-Pr*	0.01	52093-27-3
506	Bismuth(III) trifluoromethanesulfonate, TFMS-Bi*	0.01	88189-03-1
507	Europium(III) trifluoromethanesulfonate, TFMS-Eu*	0.01	52093-25-1
508	Erbium(III) trifluoromethanesulfonate, TFMS-Er*	0.01	139177-64-3
509	Gallium(III) trifluoromethanesulfonate, TFMS-Ga*	0.01	74974-60-0
510	N,N,N-Triethyl-2,2,2-trifluoroethan-1-aminium trifluoromethanesulfonate, TFMS-Triethyl(2,2,2-trifluoroethyl)azanium*	0.01	380230-73-9
511	Methanesulfonic acid, trifluoro-, calcium salt, TFMS-Ga*	0.01	55120-75-7
512	Thallium(1+) trifluoromethanesulfonate, TFMS-Tl*	0.01	73491-36-8
513	Hafnium(IV) Trifluoromethanesulfonate, TFMS-Hf*	0.01	161337-67-3
514	Perfluoro-2-methoxypropanoic acid, PMPA	0.1	13140-29-9
515	8:8 Perfluorophosphinic acid (8:8 PFPi), 8:8 PFPi	0.01	40143-79-1
516	Bis(heptadecafluorooctyl)phosphinic Acid Sodium Salt, 8:8 PFPi-Na*	0.01	500776-69-2
517	Bis(perfluorooctyl) phosphinic acid ytterbium(3+) salt, (8:8 PFPi)3Yb*	0.01	500776-71-6
518	Bis(perfluorooctyl) phosphinic acid erbium(3+) salt, (8:8 PFPi)3Er*	0.01	500776-70-5
519	4,8-Dioxa-3H-perfluorononanoic acid (ADONA), ADONA	0.01	919005-14-4
520	Propanoic acid, 2,2,3-trifluoro-3-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]-, ammonium salt (1:1), ADONA-Ammonium *	0.01	958445-44-8
521	2,2,3-Trifluoro-3-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]propanoate, ADONA-*	0.01	2127366-90-7
522	Sodium 4,8-dioxa-3H-perfluorononanoate, ADONA-Na*	0.01	2250081-67-3
523	Potassium 2,2,3-trifluoro-3-[1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy]propanoate, ADONA-K*	0.01	1087271-46-2
524	1H,1H,2H,2H-Perfluorohexan-1-ol, 4:2 FTOH	0.2	2043-47-2
525	1H,1H,2H,2H-Perfluoro-1-octanol, 6:2 FTOH	0.2	647-42-7
526	1H,1H,2H,2H-Perfluorodecan-1-ol, 8:2 FTOH	0.2	678-39-7
527	1H,1H,2H,2H-Perfluorododecan-1-ol, 10:2 FTOH	0.2	865-86-1
528	H,1H,2H,2H-perfluorotetradecan-1-ol, 12:2 FTOH	0.2	39239-77-5
529	1H,1H,2H,2H-Heptadecafluorodecyl methacrylate, 8:2 FTMA	0.2	1996-88-9
530	1H,1H,2H,2H-Perfluorododecyl methacrylate, 10:2 FTMA	0.2	2144-54-9
531	1H,1H,2H,2H-Perfluorooctyl methacrylate, 6:2 FTMAC	0.2	2144-53-8

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Item No.	Tested Items	MDL [mg/kg]	CAS No.
532	Perfluorooctyl iodide, PFOI	0.5	507-63-1
533	1H,1H,2H,2H-perfluorooctyl acrylate, 6:2FTA	0.2	17527-29-6
534	1H,1H,2H,2H-Perfluorodecyl acrylate, 8:2FTA	0.2	27905-45-9
535	1H,1H,2H,2H-perfluorododecyl acrylate, 10:2FTA	0.2	17741-60-5
536	1H,1H,2H,2H-Heptadecafluorodecyl iodide, 8:2 FTI	0.2	2043-53-0
537	1H,1H,2H,2H-Perfluorododecyl iodide, 10:2 FTI	0.2	2043-54-1
538	1H,1H,2H,2H-Perfluorotetradecyl iodide, 12:2 FTI	0.2	30046-31-2
539	1H,1H,2H,2H-Perfluorodecyltriethoxysilane, PFSI	0.2	101947-16-4

Remark:

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



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

Prepared by:

Mr. Jialong HAN

Checked by:

Mr. Feng ZHANG

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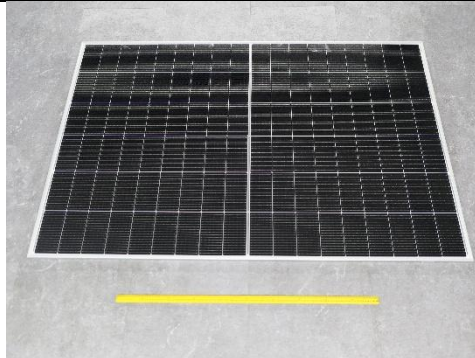
Report No. 48.400.25.0796.01-00/04

Dated 2025-08-29



APPENDIX I: Product Model

Product: PV Modules	Test model: DM445M10RT-B54HSW
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Additional model:

DMxxxM10T-78HBB,DMxxxM10T-78HSW,DMxxxM10T-78HBW,DMxxxM10T-72HBB,
DMxxxM10T-72HSW,DMxxxM10T-72HBW,DMxxxM10T-66HBB,DMxxxM10T-66HSW,
DMxxxM10T-66HBW,DMxxxM10T-60HBB,DMxxxM10T-60HSW,DMxxxM10T-60HBW,
DMxxxM10T-54HBB,DMxxxM10T-54HSW,DMxxxM10T-54HBW,
DMxxxM10RT-72HSW,DMxxxM10RT-72HBW,DMxxxM10RT-72HBB,
DMxxxM10RT-60HBB,DMxxxM10RT-60HSW,DMxxxM10RT-60HBW,
DMxxxM10RT-54HBB,DMxxxM10RT-54HSW,DMxxxM10RT-54HBW,
DMxxxM10RT-54HBB-L,DMxxxM10RT-54HSW-L, DMxxxM10RT-54HBW-L,
DMxxxM10RT-30HSW-L, DMxxxM10RT-30HBW-L, DMxxxM10RT-30HBB-L
DMxxxG12RT-66HSW,DMxxxG12RT-66HBW,DMxxxG12RT-66HBB,
DMxxxG12RT-54HSW,DMxxxG12RT-54HBW,DMxxxG12RT-54HBB,
DMxxxG12RT-48HSW,DMxxxG12RT-48HBW,DMxxxG12RT-48HBB,
DMxxxM10T-78HBB-V,DMxxxM10T-78HSW-V,DMxxxM10T-78HBW-V,
DMxxxM10T-72HBB-V,DMxxxM10T-72HSW,DMxxxM10T-72HBW-V,
DMxxxM10T-66HBB-V,DMxxxM10T-66HSW-V,DMxxxM10T-66HBW-V,
DMxxxM10T-60HBB-V,DMxxxM10T-60HSW-V,DMxxxM10T-60HBW-V,
DMxxxM10T-54HBB-V,DMxxxM10T-54HSW-V,DMxxxM10T-54HBW-V,
DMxxxM10RT-72HBB-V,DMxxxM10RT-72HSW-V,DMxxxM10RT-72HBW-V,
DMxxxM10RT-60HBB-V,DMxxxM10RT-60HSW-V,DMxxxM10RT-60HBW-V,
DMxxxM10RT-54HBB-V,DMxxxM10RT-54HSW-V,DMxxxM10RT-54HBW-V,
DMxxxG12RT-66HSW-V,DMxxxG12RT-66HBW-V,DMxxxG12RT-66HBB-V,
DMxxxG12RT-54HSW-V,DMxxxG12RT-54HBW-V,DMxxxG12RT-54HBB-V,
DMxxxG12RT-48HSW-V,DMxxxG12RT-48HBW-V,DMxxxG12RT-48HBB-V,
DMxxxM10RT-54HBB-LV,DMxxxM10RT-54HSW-LV, DMxxxM10RT-54HBW-LV,
DMxxxM10RT-30HSW-LV, DMxxxM10RT-30HBW-LV, DMxxxM10RT-30HBB-LV
DMxxxM10T-B78HBB,DMxxxM10T-B78HSW,DMxxxM10T-B78HST,DMxxxM10T-
B78HBW,DMxxxM10T-B78HBT,
DMxxxM10T-B72HBB,DMxxxM10T-B72HSW,DMxxxM10T-B72HST,DMxxxM10T-
B72HBW,DMxxxM10T-B72HBT,
DMxxxM10T-B66HBB,DMxxxM10T-B66HSW,DMxxxM10T-B66HST,DMxxxM10T-
B66HBW,DMxxxM10T-B66HBT,
DMxxxM10T-B60HBB,DMxxxM10T-B60HSW,DMxxxM10T-B60HST,DMxxxM10T-
B60HBW,DMxxxM10T-B60HBT,
DMxxxM10T-B54HBB,DMxxxM10T-B54HSW,DMxxxM10T-B54HST,DMxxxM10T-
B54HBW,DMxxxM10T-B54HBT,
DMxxxM10T-B32HBT,DMxxxM10T-B32HST,DMxxxM10T-B32HBB,DMxxxM10T-
B32HSW,DMxxxM10T-B32HBW,

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DMxxxM10RT-B72HSW,DMxxxM10RT-B72HBW,DMxxxM10RT-B72HBB,DMxxxM10RT-B72HST,DMxxxM10RT-B72HBT,
DMxxxM10RT-B60HSW,DMxxxM10RT-B60HBW,DMxxxM10RT-B60HST,DMxxxM10RT-B60HBT,DMxxxM10RT-B60HBB,
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DMxxxG12T-B66HSW,DMxxxG12T-B66HBW,DMxxxG12T-B66HST,DMxxxG12T-B66HBT,DMxxxG12T-B66HBB,
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DMxxxM10RT-B54HBB-L-U,
DMxxxG12RT-B54HST-U,DMxxxG12RT-B54HBT-U,DMxxxG12RT-B54HBB-U,DMxxxG12RT-B54HSW-U,
DMxxxG12RT-B54HBW-U,
DMxxxG12RT-B48HSW-U,DMxxxG12RT-B48HBW-U,DMxxxG12RT-B48HST-U,DMxxxG12RT-B48HBT-U,
DMxxxG12RT-B48HBB-U,
DMxxxG12RT-B48HSW-L-U,DMxxxG12RT-B48HBW-L-U,DMxxxG12RT-B48HST-L-U,DMxxxG12RT-B48HBT-L-U,
DMxxxG12RT-B48HBB-L-U,
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DMxxxM10RT-B72HBT-P,
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DMxxxM10RT-B30HSW,DMxxxM10RT-B30HBW,DMxxxM10RT-B30HBB;

PERC seires:

DMxxxM2-60SW, DMxxxM2-60BW, DMxxxM2-60BB,
DMxxxM2-72SW, DMxxxM2-72BW, DMxxxM2-72BB,
DMxxxM2-60HSW, DMxxxM2-60HBW, DMxxxM2-60HBB,
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DMxxxM6-60HSW,DMxxxM6-60HBW,DMxxxM6-60HBB,
DMxxxM6-72HSW,DMxxxM6-72HBW,DMxxxM6-72HBB,
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DMxxxM2-60HSW-V, DMxxxM2-60HBW-V, DMxxxM2-60HBB-V,
DMxxxM2-72HSW-V, DMxxxM2-72HBW-V, DMxxxM2-72HBB-V,
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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,
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DMxxxM10-B60HSW,DMxxxM10-B60HBW,DMxxxM10-B60HST,DMxxxM10-B60HBT,DMxxxM10-B60HBB,
DMxxxM10-B66HSW,DMxxxM10-B66HST,DMxxxM10-B66HBT,DMxxxM10-B66HSW,DMxxxM10-B66HBB,

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DMxxxM10-B72HSW,DMxxxM10-B72HBW,DMxxxM10-B72HST,DMxxxM10-B72HBT,DMxxxM10-B72HBB,
DMxxxM10-B78HSW,DMxxxM10-B78HBW,DMxxxM10-B78HST,DMxxxM10-B78HBT,DMxxxM10-B78HBB,
DMxxxG1-G72ST, DMxxxG1-G72SW, DMxxxG1-G72BT, DMxxxG1-G72BB,
DMxxxG1-G60ST,DMxxxG1-G60SW, DMxxxG1-G60BT, DMxxxG1-G60BT,
DMxxxG1-G72HST, DMxxxG1-G72HSW,DMxxxG1-G72HBT,DMxxxG1-G72HBB,
DMxxxG1-G60HST,DMxxxG1-G60HSW,DMxxxG1-G60HBT,DMxxxG1-G60HBT,
DMxxxG1-B72ST,DMxxxG1-B72SW,DMxxxG1-B72BT,DMxxxG1-B72BB,
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DMxxxG1-B72HST,DMxxxG1-B72HSW,DMxxxG1-B72HBT, DMxxxG1-B72HBB, DMxxxG1-B60HST,DMxxxG1-B60HSW,DMxxxG1-B60HBT,DMxxxG1-B60HBT,
DMHxxxM6A-72ST,DMHxxxM6A-72BT,DMHxxxM6A-60ST,DMHxxxM6A-60BT,
DMHxxxM6A-144HST,DMHxxxM6A-144HBT,DMHxxxM6A-120HST,DMHxxxM6A-120HBT

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-78HBB,GHxxxM10T-78HSW,GHxxxM10T-78HBW,
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GHxxxM10T-78HBB-V,GHxxxM10T-78HSW-V,GHxxxM10T-78HBW-V,
GHxxxM10T-72HBB-V,GHxxxM10T-72HSW-V,GHxxxM10T-72HBW-V,
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GHxxxM10T-60HBB-V,GHxxxM10T-60HSW-V,GHxxxM10T-60HBW-V,
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GHxxxM10RT-60HBB-V,GHxxxM10RT-60HSW-V,GHxxxM10RT-60HBW-V,
GHxxxM10RT-54HBB-V,GHxxxM10RT-54HSW-V,GHxxxM10RT-54HBW-V,
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GHxxxM10T-B78HBB,GHxxxM10T-B78HSW,GHxxxM10T-B78HST,GHxxxM10T-B78HBW,GHxxxM10T-B78HBT,
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GHxxxM10RT-B54HSW,GHxxxM10RT-B54HBW,GHxxxM10RT-B54HST,GHxxxM10RT-B54HBT,GHxxxM10RT-B54HBB,

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GHxxxM10RT-B54HBB-L,
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GHxxxG12T-B66HSW, GHxxxG12T-B66HBW, GHxxxG12T-B66HST, GHxxxG12T-B66HBT, GHxxxG12T-B66HBB,
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GHxxxM10T-G66HBB, GHxxxM10T-G66HSW, GHxxxM10T-G66HBW,
GHxxxM10T-G60HBB, GHxxxM10T-G60HSW, GHxxxM10T-G60HBW,
GHxxxM10T-G54HBB, GHxxxM10T-G54HSW, GHxxxM10T-G54HBW,
GHxxxM10RT-G60HBB, GHxxxM10RT-G60HSW, GHxxxM10RT-G60HBW,
GHxxxM10RT-G54HBB, GHxxxM10RT-G54HSW, GHxxxM10RT-G54HBW,
GHxxxG12RT-G66HSW, GHxxxG12RT-G66HBW, GHxxxG12RT-G66HBB,
GHxxxG12RT-G54HSW, GHxxxG12RT-G54HBW, GHxxxG12RT-G54HBB,
GHxxxG12RT-G48HSW, GHxxxG12RT-G48HBW, GHxxxG12RT-G48HBB,
GHxxxM10T-B32HBT, GHxxxM10T-B32HST, GHxxxM10T-B36HBT, GHxxxM10T-B36HST,
GHxxxM10T-B40HBT, GHxxxM10T-B40HST, GHxxxM10T-B44HBT, GHxxxM10T-B44HST,
GHxxxM10T-B48HBT, GHxxxM10T-B48HST, GHxxxM10T-B54HBT, GHxxxM10T-B54HST,
GHxxxM10T-B66HBT, GHxxxM10T-B66HST, GHxxxM10T-B72HBT, GHxxxM10T-B72HST,
GHxxxM10T-B78HBT, GHxxxM10T-B78HST,
GHxxxM10RT-B60HBT, GHxxxM10RT-B60HST, GHxxxM10RT-B54HBT, GHxxxM10RT-B54HST,
GHxxxM10T-B78HSW-C, GHxxxM10T-B78HST-C, GHxxxM10T-B72HSW-C, GHxxxM10T-B72HST-C,
GHxxxM10T-B66HSW-C, GHxxxM10T-B66HST-C, GHxxxM10T-B60HSW-C, GHxxxM10T-B60HST-C,
GHxxxM10T-B54HSW-C, GHxxxM10T-B54HST-C, GHxxxM10T-B48HSW-C, GHxxxM10T-B48HST-C,
GHxxxM10T-B44HST-C, GHxxxM10T-B44HSW-C, GHxxxM10T-B40HSW-C, GHxxxM10T-B40HST-C,
GHxxxM10T-B36HST-C, GHxxxM10T-B36HSW-C, GHxxxM10T-B32HST-C, GHxxxM10T-B32HSW-C,
GHxxxM10RT-B60HSW-C, GHxxxM10RT-B60HST-C, GHxxxM10RT-B54HSW-C, GHxxxM10RT-B54HST-C
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GHxxxG12RT-B40HSW-C, GHxxxG12RT-B40HST-C, GHxxxG12RT-B36HSW-C, GHxxxG12RT-B36HST-C,
GHxxxG12RT-B32HSW-C, GHxxxG12RT-B32HST-C

Remark:

- The report covers material testing on specified samples.
- 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.

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