

**Report No.:** 168443029a 002

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**Client:** JETWELL GREENTECH (DONGGUAN) LIMITED

**Contact Information:** Room 102, Block 3, Ka Ku Shang Zhong Gao Cheng, 132 Gaolong West Road, Gaobu Dongguan, China

**Identification/  
Model No(s):** SOILABLE PAPER STRAW

**Sample obtaining method:** Sending by customer

**Condition at delivery:** Test item complete and undamaged.

**Sample Receiving date:** 2023-09-05

**Testing Period:** 2023-09-11 to 2023-09-13

**Place of testing:** Chemical laboratory Shenzhen

**Test Specification:**

1. Polyfluoroalkyl Substances (PFAS) content

**Test result:**

Please refer to result page

**Other information:**

(1) Information provided by customer:

Country of Origin: CHINA

Material: Water based barrier coated paper

(2) The report 168443029a 002 superseded report 168443029a 001 issued on Sep. 15th 2023.

For and on behalf of  
TÜV Rheinland (Shenzhen) Co., Ltd.



2023-09-19

Tocker Jiang / Project Engineer

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.  
This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.  
"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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**Material List:**

Item: SOILABLE PAPER STRAW

Material No.	Material	Color	Location
M001	Paper	Beige	Straw

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**1.Per-and polyfluoroalkyl substances (PFAS)**

Test Method: For textile - Reference EN 17681-1:2022 / EN 17681-2:2022, determination by CI-GCMS, GC-MSMS and LC-MSMS.  
For others material- In house method, determination by CI-GCMS, GC-MSMS and LC-MSMS.

**Test Result:**

Test No.				T001
Material No.				M001
Test Parameter	CAS NO	Unit	RL	Result
Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.01	< RL
Ammonium pentadecafluorooctanoate (APFO) *	3825-26-1	mg/kg	0.01	< RL
Sodium perfluorooctanoate (Na-PFOA) *	335-95-5	mg/kg	0.01	< RL
Potassium perfluorooctanoate (K-PFOA) *	2395-00-8	mg/kg	0.01	< RL
Silver perfluorooctanoate (Ag-PFOA) *	335-93-3	mg/kg	0.01	< RL
Perfluorooctanoyl fluoride (F-PFOA) *	335-66-0	mg/kg	0.01	< RL
Cobalt perfluorooctanoate (PFOA-Co) *	35965-01-6	mg/kg	0.01	< RL
Cesium perfluorooctanoate (PFOA-Cs) *	17125-60-9	mg/kg	0.01	< RL
Perfluorooctanoate N,N,N-trimethylmethanaminium *	32609-65-7	mg/kg	0.01	< RL
Lithium perfluorooctanoate (PFOA-Li) *	17125-58-5	mg/kg	0.01	< RL
Chromium(3+) perfluorooctanoate (1:3) (PFOA-Cr) *	68141-02-6	mg/kg	0.01	< RL
N,N,N-Triethylethanaminium perfluorooctanoate *	98241-25-9	mg/kg	0.01	< RL
Tetrapropylammonium perfluorooctanoate *	277749-00-5	mg/kg	0.01	< RL
2H,2H,3H,3H-Perfluoroundecanoic acid (8:3-FTCA / H4PFUnA)	34598-33-9	mg/kg	0.01	< RL
Potassium 2H,2H,3H,3H-Perfluoroundecanoate (H4PFUnDA-K) *	83310-58-1	mg/kg	0.01	< RL
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2-FTS)	39108-34-4	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorodecan-1-ol (8:2-FTOH)	678-39-7	mg/kg	0.1	< RL
8:2 Mono[2-(perfluorooctyl)ethyl] phosphate (8:2-PAP)	57678-03-2	mg/kg	0.1	< RL
Perfluorooctane sulfonate (PFOS)	1763-23-1	mg/kg	0.01	< RL
Potassium Perfluorooctanesulfonate (PFOS-K) *	2795-39-3	mg/kg	0.01	< RL
"Perfluorooctanesulfonic acid, ammonium salt" (PFOS-NH <sub>4</sub> ) *	29081-56-9	mg/kg	0.01	< RL
N-Decyl-N,N-dimethyl-1-decanaminium perfluorooctanesulfonate(PFOS-DDA) *	251099-16-8	mg/kg	0.01	< RL

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Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) <sub>2</sub> ) *	70225-14-8	mg/kg	0.01	< RL
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li) *	29457-72-5	mg/kg	0.01	< RL
Perfluorooctanesulfonic acid, tetraethylammonium (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> ) *	56773-42-3	mg/kg	0.01	< RL
Perfluorooctane sulfonyl fluoride (POSF) *	307-35-7	mg/kg	0.01	< RL
Magnesium bis(perfluorooctane-1-sulfonate) (PFOS-Mg) *	91036-71-4	mg/kg	0.01	< RL
Sodium perfluoro(octane-1-sulfonate) (PFOS-Na) *	4021-47-0	mg/kg	0.01	< RL
Piperidinium perfluorooctanesulfonate *	71463-74-6	mg/kg	0.01	< RL
Tetrabutylammonium perfluorooctanesulfonate *	111873-33-7	mg/kg	0.01	< RL
Perfluorooctanesulfonamide (PFOSA)	754-91-6	mg/kg	0.01	< RL
N-methylperfluoro-1-octanesulfonamide (Me-FOSA)	31506-32-8	mg/kg	0.01	< RL
N-ethylperfluoro-1-octanesulfonamide (Sulfluramid) (Et-FOSA)	4151-50-2	mg/kg	0.01	< RL
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (MeFOSE)	24448-09-7	mg/kg	0.01	< RL
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide (EtFOSE)	1691-99-2	mg/kg	0.01	< RL
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	mg/kg	0.01	< RL
Perfluorononanoate Sodium-Salt (PFNA-Na) *	21049-39-8	mg/kg	0.01	< RL
Perfluorononanoate ammonium salt (APFN) *	4149-60-4	mg/kg	0.01	< RL
Potassium perfluorononanoate (PFNA-K) *	21049-38-7	mg/kg	0.01	< RL
Silver perfluorononanoate (PFNA-Ag) *	7358-16-9	mg/kg	0.01	< RL
Piperidinium perfluorononanoate *	95682-66-9	mg/kg	0.01	< RL
Methanaminium perfluorononanoate *	77032-23-6	mg/kg	0.01	< RL
Cyclohexanaminium perfluorononanoate *	328531-06-2	mg/kg	0.01	< RL
Perfluoro-n-decanoic acid (PFDA)	335-76-2	mg/kg	0.01	< RL
Perfluorodecanoate Sodium-salt (PFDA - Na) *	3830-45-3	mg/kg	0.01	< RL
Perfluorodecanoate ammonium salt (APFDA) *	3108-42-7	mg/kg	0.01	< RL
Potassium perfluorodecanoate (PFDA-K) *	51604-85-4	mg/kg	0.01	< RL
Lithium perfluorodecanoate (PFDA-Li) *	84743-32-8	mg/kg	0.01	< RL
Silver perfluorodecanoate (PFDA-Ag) *	5784-82-7	mg/kg	0.01	< RL
Perfluoroundecanoic acid (PFUnA)	2058-94-8	mg/kg	0.01	< RL

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Perfluoroundecanoic acid sodium salt (PFUnDA-Na) *	60871-96-7	mg/kg	0.01	< RL
Ammonium perfluoroundecanoate (PFUnDA-NH <sub>4</sub> ) *	4234-23-5	mg/kg	0.01	< RL
Potassium perfluoroundecanoate (PFUnDA-K) *	30377-53-8	mg/kg	0.01	< RL
Calcium perfluoroundecanoate (PFUnDA-Ca) *	97163-17-2	mg/kg	0.01	< RL
n-Perfluorododecanoic acid (PFDoA)	307-55-1	mg/kg	0.01	< RL
Ammonium perfluorododecanoate (PFDoA-NH <sub>4</sub> ) *	3793-74-6	mg/kg	0.01	< RL
Sodium perfluorododecanoate (PFDoDA-Na) *	60872-01-7	mg/kg	0.01	< RL
Perfluorotridecanoic acid (PFTrA)	72629-94-8	mg/kg	0.01	< RL
Ammonium perfluorotridecanoate (PFTrDA-NH <sub>4</sub> ) *	4288-72-6	mg/kg	0.01	< RL
n-Perfluorotetradecanoic acid (PFTeA)	376-06-7	mg/kg	0.01	< RL
Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6	mg/kg	0.01	< RL
Perfluorodecane sulfonic acid (PFDS)	335-77-3	mg/kg	0.01	< RL
Perfluorodecanesulfonate / Henicosafuoro-1-decanesulfonic acid anion *9	126105-34-8	mg/kg	0.01	< RL
Perfluorodecanesulfonate Sodium-salt (PFDS-Na) *	2806-15-7	mg/kg	0.01	< RL
Perfluorodecanesulfonate K-salt (PFDS-K) *	2806-16-8	mg/kg	0.01	< RL
Perfluorodecanesulfonic acid ammonium salt (PFDS-NH <sub>4</sub> ) *	67906-42-7	mg/kg	0.01	< RL
1H,1H,2H,2H-Perfluorodecanesulfonic acid (10:2-FTS)	120226-60-0	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorodecan-1-ol (10:2-FTOH)	865-86-1	mg/kg	0.1	< RL
Perfluorooctylphosphoic acid (PFOPA/C8-PFPA)	40143-78-0	mg/kg	0.1	< RL
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	mg/kg	0.01	< RL
Ammonium perfluorohexanoate (PFHxA-NH <sub>4</sub> ) *	21615-47-4	mg/kg	0.01	< RL
Potassium perfluorohexanoate (PFHxA-K) *	3109-94-2	mg/kg	0.01	< RL
Sodium perfluorohexanoate (PFHxA-Na) *	2923-26-4	mg/kg	0.01	< RL
Silver perfluorohexanoate (PFHxA-Ag) *	336-02-7	mg/kg	0.01	< RL
Lithium perfluorohexanoate (PFHxA-Li) *	90430-61-8	mg/kg	0.01	< RL
1H,1H,2H,2H-Perfluorooctan-1-ol (6:2-FTOH)	647-42-7	mg/kg	0.1	< RL
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	mg/kg	0.01	< RL
Perfluorohexanesulfonate Sodium-salt (PFHxS-Na) *	82382-12-5	mg/kg	0.01	< RL

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Ammonium perfluorohexane-1-sulphonate (PFHxS-NH <sub>4</sub> ) *	68259-08-5	mg/kg	0.01	< RL
Perfluorohexanesulfonate Potassium-salt (PFHxS-K) *	3871-99-6	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt (1:1) (PFHxS-Li) *	55120-77-9	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt (PFHxS-Zn) *	70136-72-0	mg/kg	0.01	< RL
Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (Calculated in terms of PFHxS) *	1310480-24-0	mg/kg	0.01	< RL
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	1310480-27-3	mg/kg	0.01	< RL
Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	1310480-28-4	mg/kg	0.01	< RL
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) *	1329995-45-0	mg/kg	0.01	< RL
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) *	1462414-59-0	mg/kg	0.01	< RL
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) *	1329995-69-8	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1) (PFHxS-CsH) *	92011-17-1	mg/kg	0.01	< RL
Perfluorohexane sulphonyl fluoride *	423-50-7	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9Cl) *	341035-71-0	mg/kg	0.01	< RL

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Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	213740-81-9	mg/kg	0.01	< RL
Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI) *	866621-50-3	mg/kg	0.01	< RL
Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic *	421555-74-0	mg/kg	0.01	< RL
Iodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	153443-35-7	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1) *	72033-41-1	mg/kg	0.01	< RL
N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate *	108427-55-0	mg/kg	0.01	< RL
N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate *	108427-54-9	mg/kg	0.01	< RL
Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) *	189274-31-5	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1) *	1187817-57-7	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1) *	41184-65-0	mg/kg	0.01	< RL
Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1) *	70225-16-0	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with 2-methyl-2-propanamine (1:1) *	202189-84-2	mg/kg	0.01	< RL
Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	1000597-52-3	mg/kg	0.01	< RL
Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	425670-70-8	mg/kg	0.01	< RL
Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	911027-68-4	mg/kg	0.01	< RL
Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	910606-39-2	mg/kg	0.01	< RL



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Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1- hexanesulfonate (1:1) *	144116-10-9	mg/kg	0.01	< RL
Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1- hexanesulfonate (1:1) *	341548-85-4	mg/kg	0.01	< RL
Sulfonium, (thiodi-4,1-phenylene)bis [diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6- -tridecafluoro-1-hexanesulfonic acid (1:2) *	421555-73-9	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1) *	350836-93-0	mg/kg	0.01	< RL
Dibenzo[k,n] [1,4,7,10,13]tetraoxathiacyclopentadecinium , 19-[4-(1,1-dimethylethyl)phenyl]- 6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1- hexanesulfonate (1:1) *	928049-42-7	mg/kg	0.01	< RL
Sulfonium, [4-[(2-methyl-1-oxo-2- propenyl)oxy]phenyl]diphenyl-, salt with perfluorohexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.1 <sup>3,7</sup> ]dec-2-yl methacrylate, 3-hydroxytricyclo [3.3.1.1 <sup>3,7</sup> ]dec-1-yl methacrylate and tetrahydro-2-oxo-3-furanyl methacrylate *	911027-69-5	mg/kg	0.01	< RL
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1) *	41242-12-0	mg/kg	0.01	< RL
Pentafluoropropionic acid (PFPrA)	422-64-0	mg/kg	0.01	< RL
Sodium pentafluoropropanoate (PFPrA-Na) *	378-77-8	mg/kg	0.01	< RL
Potassium perfluoropropanoate (PFPrA-K) *	378-76-7	mg/kg	0.01	< RL
Perfluoro-n-butanoic acid (PFBA)	375-22-4	mg/kg	0.01	< RL
Silver perfluorobutanoate (PFBA-Ag) *	3794-64-7	mg/kg	0.01	< RL
Potassium heptafluorobutanoate (PFBA-K) *	2966-54-3	mg/kg	0.01	< RL
Sodium perfluorobutanoate (PFBA-Na) *	2218-54-4	mg/kg	0.01	< RL
Ammonium perfluorobutanoate (PFBA- NH <sub>4</sub> ) *	10495-86-0	mg/kg	0.01	< RL
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	mg/kg	0.01	< RL
Potassium perfluoropentanoate (PFPeA-K) *	336-23-2	mg/kg	0.01	< RL
Sodium perfluoropentanoate (PFPeA-Na) *	2706-89-0	mg/kg	0.01	< RL
Ammonium perfluoropentanoate (PFPeA- NH <sub>4</sub> ) *	68259-11-0	mg/kg	0.01	< RL
Lithium perfluoropentanoate (PFPeA-Li) *	198482-22-3	mg/kg	0.01	< RL



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Silver perfluoropentanoate (PFPeA-Ag) *	2795-30-4	mg/kg	0.01	< RL
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	mg/kg	0.01	< RL
Potassium perfluoroheptanoate (PFHpA-K) *	21049-36-5	mg/kg	0.01	< RL
Sodium perfluoroheptanoate (PFHpA-Na) *	20109-59-5	mg/kg	0.01	< RL
Ammonium perfluoroheptanoate (PFHpA-NH <sub>4</sub> ) *	6130-43-4	mg/kg	0.01	< RL
Silver perfluoroheptanoate (PFHpA-Ag) *	424-05-5	mg/kg	0.01	< RL
Cesium perfluoroheptanoate (PFHpA-Cs) *	171198-24-6	mg/kg	0.01	< RL
Lithium perfluoroheptanoate (PFHpA-Li) *	60871-90-1	mg/kg	0.01	< RL
Nonacosfluoropentadecanoic acid (PFPeDA)	141074-63-7	mg/kg	0.01	< RL
Perfluorohexadecanoic Acid (PFHxDA)	67905-19-5	mg/kg	0.01	< RL
2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid (HFPO-DA)	13252-13-6	mg/kg	0.01	< RL
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, ammonium salts (HFPO-DA-NH <sub>4</sub> ) *	62037-80-3	mg/kg	0.01	< RL
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, K- salts (HFPO-DA-K) *	67118-55-2	mg/kg	0.01	< RL
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its acyl halides (HFPO-DA-F) *	2062-98-8	mg/kg	0.01	< RL
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	919005-14-4	mg/kg	0.01	< RL
Sodium dodecafluoro-3H-4,8-dioxanonanoate (NaDONA) *	2250081-67-3	mg/kg	0.01	< RL
Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA) *	958445-44-8	mg/kg	0.01	< RL
7H-Perfluoroheptanoic acid (HPFHpA)	1546-95-8	mg/kg	0.01	< RL
2,2,3,3,4,4,5,5,6,6,7,7-DODECAFLUOROHEPTANOIC ACID, SODIUM SALT (HPFHpA-Na) *	2264-25-7	mg/kg	0.01	< RL
2H,2H-Perfluorodecanoic acid (H <sub>2</sub> PFDA)	27854-31-5	mg/kg	0.01	< RL
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate *	882489-14-7	mg/kg	0.01	< RL
Perfluorobutanesulfonic acid (PFBS)	375-73-5	mg/kg	0.01	< RL
1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonyl fluoride (PFBS-F) *	375-72-4	mg/kg	0.01	< RL
Potassium nonafluoro-1-buthanesulfonate (PFBS-K) *	29420-49-3	mg/kg	0.01	< RL
Nonafluorobutanesulfonic Acid Hydrate (PFBS-H <sub>2</sub> O) *	59933-66-3	mg/kg	0.01	< RL

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N,N,N,-triethylethanaminium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1- sulfonate (PFBS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> ) *	25628-08-4	mg/kg	0.01	< RL
lithium perfluorobutanesulfonate (PFBS-Li) *	131651-65-5	mg/kg	0.01	< RL
Magnesium perfluorobutanesulfonate (PFBS-Mg) *	507453-86-3	mg/kg	0.01	< RL
1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4- nonafluoro-, sodium salt (1:1) (PFBS-Na) *	60453-92-1	mg/kg	0.01	< RL
Morpholinium perfluorobutanesulfonate (PFBS-NC <sub>4</sub> H <sub>9</sub> O) *	503155-89-3	mg/kg	0.01	< RL
Ammonium 1,1,2,2,3,3,4,4,4- nonafluorobutane-1-sulphonate (PFBS- NH <sub>4</sub> ) *	68259-10-9	mg/kg	0.01	< RL
Tetrabutyl-phosphonium nonafluoro-butane- 1-sulfonate (PFBS-P(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> ) *	220689-12-3	mg/kg	0.01	< RL
Triphenyl Sulfonium Perfluorobutane Sulfonate (PFBS-S(C <sub>6</sub> H <sub>5</sub> ) <sub>3</sub> ) *	144317-44-2	mg/kg	0.01	< RL
Dimethyl(phenyl)sulfanium perfluorobutanesulfonate (PFBS-S (CH <sub>3</sub> ) <sub>2</sub> C <sub>6</sub> H <sub>5</sub> ) *	220133-51-7	mg/kg	0.01	< RL
1-(4-butoxy-1- naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate, EC No.:468- 770-4 (PFBS-SC <sub>18</sub> H <sub>23</sub> O) *	--	mg/kg	0.01	< RL
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	mg/kg	0.01	< RL
Sodium perfluoroheptane sulfonate (PFHpS-Na) *	21934-50-9	mg/kg	0.01	< RL
Potassium Perfluoroheptanesulfonate (PFHpS-K) *	60270-55-5	mg/kg	0.01	< RL
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate *	70225-15-9	mg/kg	0.01	< RL
Lithium perfluoroheptanesulfonate (PFHpS- Li) *	117806-54-9	mg/kg	0.01	< RL
Ammonium perfluoroheptanesulfonate (PFHpS-NH <sub>4</sub> ) *	68259-07-4	mg/kg	0.01	< RL
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2-FTS)	757124-72-4	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorohexan-1-ol (4:2- FTOH)	2043-47-2	mg/kg	0.1	< RL
6:2 Mono[2-(perfluorohexyl)ethyl] phosphate (6:2-PAP)	57678-01-0	mg/kg	0.1	< RL
10:2 Mono[2-(perfluorodecyl)ethyl] Phosphate (10:2-PAP)	57678-05-4	mg/kg	0.1	< RL
Bis[2-(tridecafluorohexyl)ethoxy]phosphinic acid (6:2-diPAP)	57677-95-9	mg/kg	0.1	< RL

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Sodium bis(1H,1H,2H,2H-perfluorooctyl)phosphate (6:2 diPAP-Na) *	407582-79-0	mg/kg	0.1	< RL
6:2/8:2 Fluorotelomer phosphate diester (6:2/8:2-diPAP)	943913-15-3	mg/kg	0.1	< RL
Bis[2-(perfluorooctyl)ethyl] Phosphate/ 8:2 Fluorotelomer phosphate diester (8:2-diPAP)	678-41-1	mg/kg	0.1	< RL
Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2 diPAP-Na) *	114519-85-6	mg/kg	0.1	< RL
N-[(heptadecafluorooctyl)sulfonyl]-N-methylglycine (N-MeFOSAA)	2355-31-9	mg/kg	0.01	< RL
N-Ethyl-N-[(heptadecafluorooctyl)sulphonyl]glycine (N-EtFOSAA)	2991-50-6	mg/kg	0.01	< RL
Perfluorooctadecanoic acid (PFODA)	16517-11-6	mg/kg	0.01	< RL
Perfluorononane sulfonic acid (PFNS)	68259-12-1	mg/kg	0.01	< RL
Sodium perfluoro-1-nonanesulfonate (PFNS-Na) *	98789-57-2	mg/kg	0.01	< RL
ammonium nonadecafluorononanesulphonate (PFNS-NH <sub>4</sub> ) *	17202-41-4	mg/kg	0.01	< RL
Perfluorononanesulfonate potassium/Nonadecafluorononane-1-sulfonic acid potassium salt (PFNS-K) *	29359-39-5	mg/kg	0.01	< RL
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	mg/kg	0.1	< RL
N-Methylperfluoro-1-hexane sulfonamide (N-Me-FHxSA)	68259-15-4	mg/kg	0.01	< RL
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	mg/kg	0.01	< RL
Perfluoropentane-1-sulphonic acid (PFPeS)	2706-91-4	mg/kg	0.01	< RL
Sodium perfluoropentanesulfonate (PFPeS-Na) *	630402-22-1	mg/kg	0.01	< RL
Potassium perfluoropentane-1-sulphonate (PFPeS-K) *	3872-25-1	mg/kg	0.01	< RL
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate *	70225-17-1	mg/kg	0.01	< RL
Ammonium perfluoropentanesulfonate (PFPeS-NH <sub>4</sub> ) *	68259-09-6	mg/kg	0.01	< RL
1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methylbutane-1-sulphonamide (N-MeFBSE)	34454-97-2	mg/kg	0.01	< RL
2H-Perfluoro-2-decenoic acid (8:2 FTUCA)	70887-84-2	mg/kg	0.1	< RL
3-Perfluoropropyl propanoic acid (3:3 FTCA)	356-02-5	mg/kg	0.1	< RL
3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	mg/kg	0.1	< RL
2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	mg/kg	0.1	< RL

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3-Perfluoroheptyl propanoic acid (7:3 FTCA)	812-70-4	mg/kg	0.1	< RL
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	mg/kg	0.1	< RL
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	mg/kg	0.1	< RL
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	mg/kg	0.1	< RL
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	mg/kg	0.1	< RL
N-(3-(Dimethylamino)propyl)tridecafluorohexanesulphonamide (N-AP-FHxSA)	50598-28-2	mg/kg	0.1	< RL
Methyl pentadecafluorootanoate (MePFOA)	376-27-2	mg/kg	0.1	< RL
Ethyl perfluorooctanoate (EtPFOA)	3108-24-5	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2-FTA)	27905-45-9	mg/kg	0.1	< RL
Perfluorooctylethyl Methacrylate (8:2-FTMAC)	1996-88-9	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2-FTA)	17741-60-5	mg/kg	0.1	< RL
1H, 1H, 2H, 2H-Perfluorodecyldichloromethylsilane (C8-PFSi)	3102-79-2	mg/kg	0.1	< RL
8:2 Fluorotelomer olefin (8:2 FTO)	21652-58-4	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2-FTMAC)	2144-53-8	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorooctyl acrylate (6:2-FTA)	17527-29-6	mg/kg	0.1	< RL
1H,1H-Pentadecafluorooctyl acrylate (7:1-FTA)	307-98-2	mg/kg	0.1	< RL
Perfluorooctyl iodide (PFOI)	507-63-1	mg/kg	0.1	< RL
1H,1H,2H,2H-Heptadecafluoro-1-iododecane (8:2-FTI)	2043-53-0	mg/kg	0.1	< RL
2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMA)	2144-54-9	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	mg/kg	0.1	< RL
1H,1H,2H,2H-Nonafluorohexyl Methacrylate (4:2 FTMA)	1799-84-4	mg/kg	0.1	< RL
Perfluorohexyl iodide (PFHxI)	355-43-1	mg/kg	0.1	< RL
1H,1H-Pentadecafluoro-1-octanol (7:1 FTOH)	307-30-2	mg/kg	0.1	< RL
Heptafluorobutyramide (PFBA-NH <sub>2</sub> )	662-50-0	mg/kg	0.1	< RL
1H,1H,2H,2H-Perfluorooctyl iodide (6:2 FTI)	2043-57-4	mg/kg	0.1	< RL

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1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTESi)	101947-16-4	mg/kg	0.1	< RL
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**Abbreviation:** < = Less than  
RL = Reporting Limit  
mg/kg = milligram per kilogram  
µg/m<sup>2</sup> = microgram per square metre

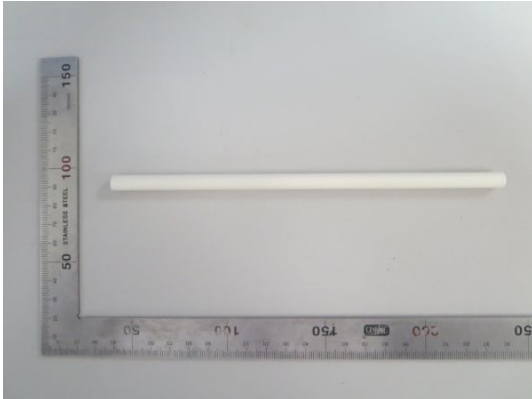
**Remark:**

\*1. The test result was reported as its related compound

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Sample Photo



- END -



## General Terms and Conditions of Business of TÜV Rheinland in Greater China

1.	<b>Scope</b>	3.8	TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per annum, the client shall not have the right to refuse the increase. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the month in which the increase in fees has been notified. The increased fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.	13.2	The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international trade regulations or embargoes and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incurred thereof by TÜV Rheinland.
1.1	These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTBCB") is made between the client and one or more natural entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China hereof refers to Mainland China, Hong Kong and Taiwan. The client hereby includes:	3.9	Only legally established and undisputed claims may be offset against claims by TÜV Rheinland. TÜV Rheinland shall have the right at all times to setoff any amount due or payable by the client, if relevant to the subject matter of the contract, by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland.	14.	<b>Data protection notice</b>
1.2	a) a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;	3.10	Acceptance of work	14.1	The client understands and agrees that TÜV Rheinland processes personal data (including but not limited to personal information) of the client and its related parties (including but not limited to the supplier of the client) for the purpose of fulfilling this contract. The client confirms that it has reviewed the sample content of the data subject, which includes the reference samples to access, use, or process the personal data that the client collected or processed by itself and transferred to TÜV Rheinland. For certain services, we may also process sensitive personal data. TÜV Rheinland will use and process the data in accordance with the relevant legal basis. If any personal data has to be disclosed or transferred to any third party or any overseas party outside of the district in which the personal data was collected, the client also confirms that it has reviewed the prior consent of the data subject. TÜV Rheinland will carry out cross-border data transmission and protect the data in compliance with the privacy and personal data security related laws and regulations in China and the local country. TÜV Rheinland will take measures to avoid fraud, leakage, abuse, manipulation, damage or unauthorized access of personal data. The personal data will be deleted immediately as soon as a corresponding reason for deletion arises. Data subjects may exercise the following rights: right of information, right of decision, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. In addition, persons concerned by the data processing have the right to revoke their consent at any time for the future, as well as the right to file a complaint with the competent data protection supervisory authority. For further details on the processing of personal data by TÜV Rheinland as the person responsible or contract processor, please refer to the respective data protection information. You can contact the Group Data Protection Officer of TÜV Rheinland, c/o group data protection@tuv.com or by post at the following address: TÜV Rheinland AG, c/o Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.
1.3	b) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.	3.11	Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.	15.	<b>Retention of test material and documentation</b>
1.4	The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.	3.12	If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client expresses acceptance within this period starting at least one fundamental breach of contract by TÜV Rheinland. The client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.	15.1	The test samples submitted by the client to TÜV Rheinland for testing will be scrapped following testing or will be returned to the client at the client's expense. The only exceptions are test samples, which are placed in storage on the basis of statutory regulations or of another agreement with the client.
2.	<b>Quotations</b>	3.13	If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.	15.2	Charges apply if the test samples are stored at the premises of TÜV Rheinland. The cost of placing a test sample into storage will be disclosed to the client in the quotation.
2.1	Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.	3.14	During the Follow-Audit stage, if the client was unable to make use of the time windows provided for the scope of a certification procedure for auditing performance by TÜV Rheinland and the client is therefore to be withdrawn (e.g. performance of surveillance audits), or if the client cancels or postpones a confirmed audit within two (2) weeks before the agreed date, TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for expenses. The client reserves the right to refuse the payment of the fee in case of no damage whatsoever or only a considerably lower damage than the above lump sum.	15.3	If reference samples or documentations are given to the client to be placed in storage at their premises, the reference samples or documentations must be made available to TÜV Rheinland upon request promptly and free of charge. If the client, in response to such a request, is incapable of making available the reference samples and/or documentations, any liability claims for material and pecuniary damage resulting from the respective testing and certification that is brought forward by the client against TÜV Rheinland shall be excluded.
3.	<b>Coming into effect and duration of contracts</b>	3.15	If the client undertakes in the case of a lump-sum compensation of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has not suffered no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.	15.4	The retention period for the documentation shall be 10 (ten) years after the expiry of the test mark certificates or shall meet the applicable legal requirements for EU/EEC certificates of conformity and GS mark certificates.
3.1	The contract shall come into effect after the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice sent via electronic means) or by performing the respective service.	3.16	Confidentiality	15.5	The costs of the handover and dispatch of the test samples for storage on the client's premises are borne by the client. TÜV Rheinland will be liable for the loss of test samples or reference samples from the laboratories or warehouses of TÜV Rheinland only in case of gross negligence.
3.2	The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.	3.17	For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, patents, designs, drawings, documents, reports, test results, test reports, samples, project documents, pricing and financial information, customer and supplier information, and marketing techniques and materials, tangible or intangible, that are supplied, transferred or otherwise disclosed by one Party (the "disclosing party") to the other Party (the "receiving party") in writing or orally, in printed or electronic format. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal and not proprietary to the client) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and enabling the provision of services.	16.	<b>Termination of the contract</b>
3.3	If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a three-month notice prior to the end of the contractual term.	3.18	The disclosing party shall mark all confidential information disclosed in written form as confidential information by means of a stamp or by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received. The disclosing party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received. The disclosing party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	16.1	Notwithstanding clause 3.3 of the GTBCB, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or, in the case of services combined in one contract, each of the combined services, if the client or TÜV Rheinland, independently of TÜV Rheinland, has committed a material breach of the contract. In the event of a breach of the contract, the client reserves the right to terminate the contract with six (6) months' notice to the end of the contractually agreed term. The notice period shall be shortened to six (6) weeks in case of TÜV Rheinland is prevented from performing the services due to loss or a suspension of its accreditation or notification.
4.	<b>Scope of services</b>	3.19	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	16.2	For good causes, TÜV Rheinland may consider giving a written notice to the client to terminate the contract and to return the test samples and the client shall pay the relevant service fees for the services provided by TÜV Rheinland up to the termination date of the contract.
4.1	The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed service scope of TÜV Rheinland by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided. Unless otherwise agreed, services beyond the scope of the service description (e.g. checking the correctness and functionality of parts, product processes, installations, organizations not listed in the service description, as well as the intended use and application of such) are not covered. In particular, no responsibility is assumed for the design, selection of materials, construction and use of an existing part, product, process or plant, unless this is expressly stated in the order.	3.20	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	16.3	For good causes, TÜV Rheinland may consider giving a written notice to the client to terminate the contract and to return the test samples and the client shall pay the relevant service fees for the services provided by TÜV Rheinland up to the termination date of the contract.
4.2	The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.	3.21	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	16.4	TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to provide the time windows for auditing service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.
4.3	TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.	3.22	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	17.	<b>Force Majeure</b>
4.4	On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (in part quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organizations, use and application in accordance with regulations, nor of the systems on which the installation is based. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of material and assembly of installations examined, nor for their use and application in accordance with regulations, unless these questions are expressly covered by the contract.	3.23	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	17.1	Force Majeure means the occurrence of an event or circumstance that prevents or impedes a Party from performing one or more of its contractual obligations under the contract, and if to the extent that that Party proves: (a) that such impediment is beyond its reasonable control; and (b) that it did not and reasonably could not have prevented or overcome the impediment; and (c) that the effects of the impediment could not reasonably have been avoided or overcome by the affected Party.
4.5	In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations or other safety regulations, unless otherwise expressly agreed in writing.	3.24	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	17.2	In the absence of proof to the contrary, the following events affecting a Party shall be presumed to fulfil conditions (a) and (b) under paragraph 1 of this Clause: (i) war (whether declared or not), hostilities, invasion, act of foreign enemies, acts of terrorism, sabotage, act of piracy, riot, rebellion and revolution, military or usurped power, insurrection, act of terrorism, sabotage or piracy, (ii) currency and trade restriction, embargo, sanction; (iv) act of authority whether lawful or unlawful, compliance with any law or governmental measures such as boycott, strike and lock-out, regulation, nationalization; (v) plague, epidemic, natural disaster or extreme natural event; (vi) explosion, fire, destruction of equipment, prolonged break-down of transport, telecommunication, information system or energy; (vii) general labour disturbance such as boycott, strike and lock-out, go-slow, occupation of factories and premises.
4.6	If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, written a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.	3.25	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	17.3	If the Party successfully proves the causality of the event, it shall be relieved from its duty to perform its obligations under the contract and from any liability in damages or from any other contractual remedy for breach of contract, from the time at which the impediment causes inability to perform, provided that the notice was given without delay. If notice thereof is not given without delay, the relief is effective from the time at which notice thereof reaches the other Party. Where the effect of the impediment or event involved is temporary, the above consequences shall apply only as long as the impediment impedes performance by the affected Party. Where the effect of the impediment is permanent, it has the effect of substantially depriving the contracting Parties of what they were reasonably entitled to expect under the contract. Either Party has the right to terminate the contract by giving written notice of termination to the other Party. The termination shall be effective from the date of the termination of the contract. The termination shall be effective from the date of the termination of the contract. The termination shall be effective from the date of the termination of the contract.
4.7	The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying conformity of the work results (test reports, test results, expert reports, etc.) is not part of the agreed services. The client also agrees that the inspection results shall not be included in extracts - to third parties in accordance with clause 11.4.	3.26	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	18.	<b>Hardship</b>
4.8	The client understands and agrees that in order to perform the contract with TÜV Rheinland, the client may need to sign one or more contracts/agreements with a third party(ies) and establish legal relationships with that/those third party(ies) according to such contracts/agreements. TÜV Rheinland shall not be responsible for the construction, selection of material and assembly of installations examined, nor for their use and application in accordance with regulations, unless these questions are expressly covered by the contract.	3.27	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	18.1	The Parties are bound to perform their contractual duties even if events have rendered performance more onerous than could reasonably have been anticipated at the time of the conclusion of the contract.
4.9	In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations or other safety regulations, unless otherwise expressly agreed in writing.	3.28	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	18.2	Notwithstanding paragraph 1 of this Clause, where a Party proves that: (a) the continued performance of its contractual duties has become excessively onerous due to an event beyond its reasonable control which it could not reasonably have been expected to have taken into account at the time of the conclusion of the contract; and that (b) it could not reasonably have avoided or overcome the event or the consequences, the Parties are bound, within a reasonable time of the invocation of this Clause, to negotiate alternative contractual terms which reasonably allow to overcome the consequences of the event.
5.	<b>Performance periods/dates</b>	3.29	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	18.3	Where Clause 18.2 applies, but where the Parties have been unable to agree alternative contractual terms as provided in that paragraph, the Party invoking this Clause is entitled to terminate the contract, but cannot request adaptation by the judge or arbitrator without the agreement of the other Party.
5.1	The contractually agreed periods/dates of performance are based on estimates of the work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.	3.30	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	19.	<b>Partial invalidity, written form, place of jurisdiction and dispute resolution</b>
5.2	If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.	3.31	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	19.1	All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.
5.3	Articles 5.1 and 5.2 also apply, even if the client expressly approves by the client, to all extensions of agreed periods of performance not caused by TÜV Rheinland.	3.32	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	19.2	If the contract or several of the provisions under these terms and conditions are found to be ineffective, the contracting parties shall replace the invalid provision with a legally valid one that comes closest to the content of the invalid provision and which is in line with the intentions of the parties.
5.4	TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with article 5.1. In particular, if the client has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.	3.33	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	19.3	Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be construed following the rules as below:
5.5	If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to resume performance.	3.34	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	19.4	TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.
5.6	If the client is obliged to comply with legal, officially prescribed and/or by the accreditator prescribed deadlines, it is the client's responsibility to agree on performance dates with TÜV Rheinland, which enables the client to comply with the legal and/or officially prescribed deadlines. TÜV Rheinland assumes no responsibility in this respect unless TÜV Rheinland has been expressly asked to writing specifically stating that ensuring the deadlines is the contractual obligation of TÜV Rheinland.	3.35	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.	<b>Liability of TÜV Rheinland</b>
6.	<b>The client's obligation to cooperate</b>	3.36	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.1	Respective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annual recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order in which the damage or loss is incurred. In the event of a breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the actual amount of damages reasonably foreseeable as a possible consequence of such breach of contract at the time of the breach (reasonably foreseeable damages), unless any of the circumstances described in article 12.2 applies.
6.1	The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.	3.37	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.2	TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel is made available in the name of TÜV Rheinland or if TÜV Rheinland is held liable for the acts of the personnel made available by the client under the foregoing provision, if the client internally assigns the personnel against any claims made by third parties arising from or in connection with such personnel's acts.
6.2	Design documents, supplies, auxiliary staff, etc. necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that:	3.38	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.3	Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client.
6.3	a) it has required statutory qualifications;	3.39	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.4	The limitation periods for claims for damages shall be based on statutory provisions.
6.4	b) the product, service or management system to be certified complies with applicable laws and regulations; and	3.40	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	20.5	None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.
6.5	c) it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.	3.41	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	21.	<b>Export control</b>
6.6	If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to (i) immediately terminate the contract without prior notice; and (ii) to withdraw the issued testing/recertification if any.	3.42	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.	21.1	When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.
6.7	The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by the client or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.	3.43	The receiving party shall not be liable for the disclosure of confidential information by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information received.		
7.	<b>Prices</b>				
7.1	If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred plus a price in agreed in writing, invoicing shall be made in accordance with the price of TÜV Rheinland at the time of performance.				
7.2	Unless otherwise agreed, work shall be invoiced according to the progress of the work.				
7.3	If the execution of the work is delayed due to circumstances beyond the control of the client or the agreed fixed price exceeds 25,000 Euro or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.				
8.	<b>Payment terms</b>				
8.1	All invoice amounts shall be due for payment within 30 days of the invoice date without deduction on receipt of the invoice. No discounts and rebates shall be granted.				
8.2	Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.				
8.3	In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.				
8.4	Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue and/or to perform the contract.				
8.5	The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been declared due to the client.				
8.6	Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.				
8.7	TÜV Rheinland shall be entitled to demand appropriate advance payments.				