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Client: QINGDAO MAIPENGLA INTERNATIONAL TRADE CO., LTD.

Contact Information: No.353, Xiaozhuang Community, Xifuzhen Subdistrict, Chengyang

District, Qingdao, Shandong, P.R. China

*Identification*/ 10 Materials

Model No(s):

Sample obtaining method: Sending by customer

Condition at delivery: Test item complete and undamaged.

Sample Receiving date: 2024-03-12

Testing Period: 2024-03-12 to 2024-03-19

Place of testing: Chemical laboratory Qingdao

Test Specification:

Customer's requirement:

1. Short Chain Chlorinated Paraffin (SCCP) - according to Regulation (EU) PASS 2019/1021

2. Hexabromocyclododecane (HBCDD) content - according to Regulation (EU) PASS 2019/1021

3. Per-and polyfluoroalkyl substances (PFAS) PASS

For and on behalf of

TÜV Rheinland/CCIC (Qingdao) Co., Ltd.

2024-03-20 Nina Yang / Senior 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: 10 Materials

Material No.	Material	Color	Location
M001	Plastic	white	Refer to photo
M002	Plastic	green	Refer to photo
M003	Plastic	black	Refer to photo
M004	Plastic	silvery	Refer to photo
M005	Plastic	beige/khaki	Refer to photo
M006	Plastic	brown/silvery	Refer to photo
M007	Plastic	blue	Refer to photo
M008	Plastic	orange	Refer to photo
M009	Plastic	multi-color	Refer to photo
M010	Plastic	white/transparent	Refer to photo



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# 1. Short Chain Chlorinated Paraffin (SCCP)

Test Method: ref. to EN ISO 18219-1:2021/ ISO 18219-2:2021

### Test result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Result
T001	M001 + M002 + M003 + M004 + M005	SCCP	%	0.01	0.15	< RL
T002	M006 + M007 + M008 + M009 + M010	SCCP	%	0.01	0.15	< RL

**Abbreviation:** < = less than

RL = Report Limit

SCCP = Short Chain Chlorinated Paraffin  $(C_{10}-C_{13})$ 

MCCP = Medium Chain Chlorinated Paraffins (C14 - C17)

% = percentage

# Remark:

\* According to Regulation (EU) 2019/1021 as regards Annex I:

Alkanes C <sub>10</sub> -C <sub>13</sub> , chloro (short-chain chlorinated paraffins) (SCCPs)	Maximum Permissible Limit
The production , placing on the market and use of articles containing SCCPs	< 0.15% by weight
The production , placing on the market and use of substances or preparations containing SCCPs	< 1% by weight



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# 2. Hexabromocyclododecane (HBCDD) content - Total Bromine screening

Test Method: ref. to IEC 62321-3-1:2013

# **Test Results:**

Material No.	Total Br
M001	BL
M002	BL
M003	BL
M004	BL
M005	BL
M006	BL
M007	BL
M008	BL
M009	BL
M010	BL

Abbreviation: Br = Bromine

BL= Below limit OL= Over limit d.= detected

## Remark:

Recommended XRF Screening limits in mg/kg for Bromine (Br) test:

ELEMENT	Concentration (mg/kg)
Br	BL < 50-3σ < X

Remark: The symbol "X" marks the region where further investigation is necessary.

<sup>\*1</sup> The screening result was detected below limit.



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# 3.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	T002	T003	T004
	Material No.:	M001	M002	M003	M004
Parameter	Unit	Result	Result	Result	Result
PFAS substances (*1)	mg/kg	< RL	< RL	< RL	< RL
Conclusion - Perfluorooctane sulfonic acid and its derivatives (PFOS) – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - Perfluorooctanoic acid (PFOA) and its salts and PFOA-related substances – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - PFHxS and its salts and PFHxS related compounds – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - Selected Perfluo acids (C9-C14-PFCA) their salt PFCA related substances – Ac XVII of Regulation (EC) No 190 (REACH)	s and C9-C14- cording to Annex	PASS	PASS	PASS	PASS



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	Test No.	T005	T006	T007	T008
	Material No.:	M005	M006	M007	M008
Parameter	Unit	Result	Result	Result	Result
PFAS substances (*1)	mg/kg	< RL	< RL	< RL	< RL
Conclusion - Perfluorooctane sulfonic acid and its derivatives (PFOS) – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - Perfluorooctanoic acid (PFOA) and its salts and PFOA-related substances – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - PFHxS and its salts and PFHxS related compounds – According to Regulation (EU) 2019/1021		PASS	PASS	PASS	PASS
Conclusion - Selected Perfluorinated carboxylic acids (C9-C14-PFCA) their salts and C9-C14-PFCA related substances – According to Annex XVII of Regulation (EC) No 1907/2006 entry 68 (REACH)		PASS	PASS	PASS	PASS



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	Test No.	T009	T010
	Material No.:	M009	M010
Parameter	Unit	Result	Result
PFAS substances (*1)	mg/kg	< RL	< RL
Conclusion - Perfluorooctane sulfonic acid and its derivatives (PFOS) – According to Regulation (EU) 2019/1021		PASS	PASS
Conclusion - Perfluorooctanoidits salts and PFOA-related substance According to Regulation (EU) 2	PASS	PASS	
Conclusion - PFHxS and its salts and PFHxS related compounds – According to Regulation (EU) 2019/1021		PASS	PASS
Conclusion - Selected Perfluorinated carboxylic acids (C9-C14-PFCA) their salts and C9-C14-PFCA related substances – According to Annex XVII of Regulation (EC) No 1907/2006 entry 68 (REACH)		PASS	PASS

**Abbreviation:** < = Less than

RL = Reporting Limit

mg/kg = milligram per kilogram



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## Remark:

(\*1) The reporting limit for each PFAS substance:

Substances	CAS No.	Unit	Reporting Limit
Perfluorooctanoic acid (PFOA)	335-67-1	mg/kg	0.01
Ammonium pentadecafluorooctanoate (APFO) *	3825-26-1	mg/kg	0.01
Sodium perfluorooctanoate (Na-PFOA) *	335-95-5	mg/kg	0.01
Potassium perfluorooctanoate (K-PFOA) *	2395-00-8	mg/kg	0.01
Silver perfluorooctanoate (Ag-PFOA) *	335-93-3	mg/kg	0.01
Perfluorooctanoyl fluoride (F-PFOA) *	335-66-0	mg/kg	0.01
Cobalt perfluorooctanoate (PFOA-Co) *	35965-01-6	mg/kg	0.01
Cesium perfluorooctanoate (PFOA-Cs) *	17125-60-9	mg/kg	0.01
Perfluorooctanoate N,N,N-trimethylmethanaminium *	32609-65-7	mg/kg	0.01
Lithium perfluorooctanoate (PFOA-Li) *	17125-58-5	mg/kg	0.01
Chromium(3+) perfluorooctanoate (1:3) (PFOA-Cr) *	68141-02-6	mg/kg	0.01
N,N,N-Triethylethanaminium perfluorooctanoate *	98241-25-9	mg/kg	0.01
Tetrapropylammonium perfluorooctanoate *	277749-00-5	mg/kg	0.01
2H,2H,3H,3H-Perfluoroundecanoic acid (8:3-FTCA / H4PFUnA)	34598-33-9	mg/kg	0.01
Potassium 2H,2H,3H,3H-Perfluoroundecanoate (H4PFUnDA-K) *	83310-58-1	mg/kg	0.01
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2-FTS)	39108-34-4	mg/kg	0.1
1H,1H,2H,2H-Perfluorodecan-1-ol (8:2-FTOH)	678-39-7	mg/kg	0.1
8:2 Mono[2-(perfluorooctyl)ethyl] phosphate (8:2-PAP)	57678-03-2	mg/kg	0.1
Perfluorooctane sulfonate (PFOS)	1763-23-1	mg/kg	0.01
Potassium Perfluorooctanesulfonate (PFOS-K) *	2795-39-3	mg/kg	0.01
"Perfluorooctanesulfonic acid, ammonium salt" (PFOS-NH <sub>4</sub> ) *	29081-56-9	mg/kg	0.01
N-Decyl-N,N-dimethyl-1-decanaminium perfluorooctanesulfonate (PFOS-DDA) *	251099-16-8	mg/kg	0.01
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) <sub>2</sub> ) *	70225-14-8	mg/kg	0.01
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li) *	29457-72-5	mg/kg	0.01
Perfluorooctanesulfonic acid, tetraethylammonium (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> ) *	56773-42-3	mg/kg	0.01
Perfluorooctane sulfony fluoride (POSF) *	307-35-7	mg/kg	0.01
Magnesium bis(perfluorooctane-1-sulfonate) (PFOS-Mg) *	91036-71-4	mg/kg	0.01
Sodium perfluoro(octane-1-sulfonate) (PFOS-Na) *	4021-47-0	mg/kg	0.01
Piperidinium perfluorooctanesulfonate *	71463-74-6	mg/kg	0.01
Tetrabutylammonium perfluorooctanesulfonate *	111873-33-7	mg/kg	0.01
Perfluorooctanesulfonamide (PFOSA)	754-91-6	mg/kg	0.01
N-methylperfluoro-1-octanesulfonamide (Me-FOSA)	31506-32-8	mg/kg	0.01
N-ethylperfluoro-1-octanesulfonamide (Sulfluramid) (Et-FOSA)	4151-50-2	mg/kg	0.01
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (MeFOSE)	24448-09-7	mg/kg	0.01
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide (EtFOSE)	1691-99-2	mg/kg	0.01
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	mg/kg	0.01
Perfluorononanoate Sodium-Salt (PFNA-Na) *	21049-39-8	mg/kg	0.01
Perfluorononanoate ammounium salt (APFN) *	4149-60-4	mg/kg	0.01
Potassium perfluorononanoate (PFNA-K) *	21049-38-7	mg/kg	0.01
Silver perfluorononanoate (PFNA-Ag) *	7358-16-9	mg/kg	0.01
Piperidinium perfluorononanoate *	95682-66-9	mg/kg	0.01
Methanaminium perfluorononanoate *	77032-23-6	mg/kg	0.01
Cyclohexanaminium perfluorononanoate *	328531-06-2	mg/kg	0.01
Perfluoro-n-decanoic acid (PFDA)	335-76-2	mg/kg	0.01
Perfluorodecanoate Sodium-salt (PFDA –Na) *	3830-45-3	mg/kg	0.01



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Substances	CAS No.	Unit	Reporting Limit
Perfluorodecanoate ammonium salt (APFDA) *	3108-42-7	mg/kg	0.01
Potassium perfluorodecanoate (PFDA-K) *	51604-85-4	mg/kg	0.01
Lithium perfluorodecanoate (PFDA-Li) *	84743-32-8	mg/kg	0.01
Silver perfluorodecanoate (PFDA-Ag) *	5784-82-7	mg/kg	0.01
Perfluoroundecanoic acid (PFUnA)	2058-94-8	mg/kg	0.01
Perfluoroundecanoic acid sodium salt (PFUnDA-Na) *	60871-96-7	mg/kg	0.01
Ammonium perfluoroundecanoate (PFUnDA-NH <sub>4</sub> ) *	4234-23-5	mg/kg	0.01
Potassium perfluoroundecanoate (PFUnDA-K) *	30377-53-8	mg/kg	0.01
Calcium perfluoroundecanoate (PFUnDA-Ca) *	97163-17-2	mg/kg	0.01
n-Perfluorododecanoic acid (PFDoA)	307-55-1	mg/kg	0.01
Ammonium perfluorododecanoate (PFDoA-NH <sub>4</sub> ) *	3793-74-6	mg/kg	0.01
Sodium perfluorododecanoate (PFDoDA-Na) *	60872-01-7	mg/kg	0.01
Perfluorotridecanoic acid (PFTrA)	72629-94-8	mg/kg	0.01
Ammonium perfluorotridecanoate (PFTrDA-NH <sub>4</sub> ) *	4288-72-6	mg/kg	0.01
n-Perfluorotetradecanoic acid (PFTeA)	376-06-7	mg/kg	0.01
Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6	mg/kg	0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	mg/kg	0.01
Perfluorodecanesulfonate / Henicosafluoro-1-decanesulfonic acid anion *	126105-34-8	mg/kg	0.01
Perfluorodecanesulfonate Sodium-salt (PFDS-Na) *	2806-15-7	mg/kg	0.01
Perfluorodecanesulfonate K-salt (PFDS-K) *	2806-16-8	mg/kg	0.01
Perfluorodecanesulfonic acid ammonium salt (PFDS-NH <sub>4</sub> ) *	67906-42-7	mg/kg	0.01
1H,1H,2H,2H-Perfluorododecanesulfonic acid (10:2-FTS)	120226-60-0	mg/kg	0.1
1H,1H,2H,2H-Perfluorododecan-1-ol (10:2-FTOH)	865-86-1	mg/kg	0.1
Perfluorooctylphosphoic acid (PFOPA/C8-PFPA)	40143-78-0	mg/kg	0.1
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	mg/kg	0.01
Ammonium perfluorohexanoate (PFHxA-NH <sub>4</sub> ) *	21615-47-4	mg/kg	0.01
Potassium perfluorohexanoate (PFHxA-K) *	3109-94-2	mg/kg	0.01
Sodium perfluorohexanoate (PFHxA-Na) *	2923-26-4	mg/kg	0.01
Silver perfluorohexanoate (PFHxA-Ag) *	336-02-7	mg/kg	0.01
Lithium perfluorohexanoate (PFHxA-Li) *	90430-61-8	mg/kg	0.01
1H,1H,2H,2H-Perfluorooctan-1-ol (6:2-FTOH)	647-42-7	mg/kg	0.1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	mg/kg	0.01
Perfluorohexanesulfonate Sodium-salt (PFHxS-Na) *	82382-12-5	mg/kg	0.01
Ammonium perfluorohexane-1-sulphonate (PFHxS-NH <sub>4</sub> ) *	68259-08-5	mg/kg	0.01
Perfluorohexanesulfonate Potassium-salt (PFHxS-K) *	3871-99-6	mg/kg	0.01
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
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
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
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
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



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Substances	CAS No.	Unit	Reporting Limit
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
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
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
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
Perflurohexane sulphonyl fluoride *	423-50-7	mg/kg	0.01
1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI) *	341035-71-0	mg/kg	0.01
lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) *	213740-81-9	mg/kg	0.01
lodonium, 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
lodonium, 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
lodonium, 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
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
N,N,N-triethylethanaminium tridecafluorohexane-1-sulfonate *	108427-55-0	mg/kg	0.01
N,N,N-tributylbutan-1-aminium tridecafluorohexane-1-sulfonate *	108427-54-9	mg/kg	0.01
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
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
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
Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1) *	70225-16-0	mg/kg	0.01
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
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
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
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
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
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
Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) $^{\ast}$	341548-85-4	mg/kg	0.01
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
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
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
Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with *	911027-69-5	mg/kg	0.01
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
Pentafluoropropionic acid (PFPrA)	422-64-0	mg/kg	0.01



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Substances	CAS No.	Unit	Reporting Limit
Sodium pentafluoropropanoate (PFPrA-Na) *	378-77-8	mg/kg	0.01
Potassium perfluoropropanoate (PFPrA-K) *	378-76-7	mg/kg	0.01
Perfluoro-n-butanoic acid (PFBA)	375-22-4	mg/kg	0.01
Silver perfluorobutanoate (PFBA-Ag) *	3794-64-7	mg/kg	0.01
Potassium heptafluorobutanoate (PFBA-K) *	2966-54-3	mg/kg	0.01
Sodium perfluorobutanoate (PFBA-Na) *	2218-54-4	mg/kg	0.01
Ammonium perfluorobutanoate (PFBA-NH4) *	10495-86-0		0.01
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	mg/kg	0.01
Potasium perfluoropentanoate (PFPeA-K) *	336-23-2	mg/kg	0.01
		mg/kg	0.01
Sodium perfluoropentanoate (PFPeA-Na) *	2706-89-0 68259-11-0	mg/kg	0.01
Ammonium perfluoropentanoate (PFPeA-NH <sub>4</sub> ) *		mg/kg	0.01
Lithium perfluoropentanoate (PFPeA-Li) *	198482-22-3 2795-30-4	mg/kg	0.01
Silver perfluoropentanoate (PFPeA-Ag) *		mg/kg	
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	mg/kg	0.01
Potassium perfluoroheptanoate (PFHpA-K) *	21049-36-5	mg/kg	0.01
Sodium perfluoroheptanoate (PFHpA-Na ) *	20109-59-5	mg/kg	0.01
Ammonium perfluoroheptanoate (PFHpA-NH <sub>4</sub> ) *	6130-43-4	mg/kg	0.01
Silver perfluoroheptanoate (PFHpA-Ag) *	424-05-5	mg/kg	0.01
Cesium perfluoroheptanoate (PFHpA-Cs) *	171198-24-6	mg/kg	0.01
Lithium perfluoroheptanoate (PFHpA-Li) *	60871-90-1	mg/kg	0.01
Nonacosafluoropentadecanoic acid (PFPeDA)	141074-63-7	mg/kg	0.01
Perfluorohexadecanoic Acid (PFHxDA)	67905-19-5	mg/kg	0.01
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
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, ammonium salts (HFPO-DA-NH <sub>4</sub> ) *	62037-80-3	mg/kg	0.01
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, K- salts (HFPO-DA-K) *	67118-55-2	mg/kg	0.01
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its acyl halides (HFPO-DA-F) *	2062-98-8	mg/kg	0.01
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	919005-14-4	mg/kg	0.01
Sodium dodecafluoro-3H-4,8-dioxanonanoate (NaDONA) *	2250081-67-3	mg/kg	0.01
Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA) *	958445-44-8	mg/kg	0.01
7H-Perfluoroheptanoic acid (HPFHpA)	1546-95-8	mg/kg	0.01
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
2H,2H-Perfluorodecanoic acid (H2PFDA)	27854-31-5	mg/kg	0.01
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate *	882489-14-7	mg/kg	0.01
Perfluorobutanesulfonic acid (PFBS)	375-73-5	mg/kg	0.01
1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonyl fluoride (PFBS-F) *	375-72-4	mg/kg	0.01
Potassium nonafluoro-1-butanesulfonate (PFBS-K) *	29420-49-3	mg/kg	0.01
Nonafluorobutanesulfonic Acid Hydrate (PFBS-H <sub>2</sub> O) *	59933-66-3	mg/kg	0.01
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
lithium perfluorobutanesulfonate (PFBS-Li) *	131651-65-5	mg/kg	0.01
Magnesium perfluorobutanesulfonate (PFBS-Mg) *	507453-86-3	mg/kg	0.01
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
Morpholinium perfluorobutanesulfonate (PFBS-NC <sub>4</sub> H <sub>9</sub> O) *	503155-89-3	mg/kg	0.01
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
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
Triphenyl Sulfonium Perfluorobutane Sulfonate (PFBS-S(C <sub>6</sub> H <sub>5</sub> ) <sub>3</sub> ) *	144317-44-2	mg/kg	0.01
Thenony, Canonian i Cinaciobatane Canoniale (i i DO-O(O61 15/3)	177017-44-2	ilig/kg	0.01



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Substances	CAS No.	Unit	Reporting Limit
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
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
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	mg/kg	0.01
Sodium perfluoroheptane sulfonate (PFHpS-Na) *	21934-50-9	mg/kg	0.01
Potassium Perfluoroheptanesulfonate (PFHpS-K) *	60270-55-5	mg/kg	0.01
Bis(2-hydroxyethyl)ammonium perfluoroheptanesulfonate *	70225-15-9	mg/kg	0.01
Lithium perfluoroheptanesulfonate (PFHpS-Li) *	117806-54-9	mg/kg	0.01
Ammonium perfluoroheptanesulfonate (PFHpS-NH <sub>4</sub> ) *	68259-07-4	mg/kg	0.01
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2-FTS)	757124-72-4	mg/kg	0.1
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	mg/kg	0.1
1H,1H,2H,2H-Perfluorohexan-1-ol (4:2-FTOH)	2043-47-2	mg/kg	0.1
6:2 Mono[2-(perfluorohexyl)ethyl] phosphate (6:2-PAP)	57678-01-0	mg/kg	0.1
10:2 Mono[2-(perfluorodecyl)ethyl] Phosphate (10:2-PAP)	57678-05-4	mg/kg	0.1
Bis[2-(tridecafluorohexyl)ethoxy]phosphinic acid (6:2-diPAP)	57677-95-9	mg/kg	0.1
Sodium bis(1H,1H,2H,2H-perfluorooctyl)phosphate (6:2 diPAP-Na) *	407582-79-0	mg/kg	0.1
6:2/8:2 Fluorotelomer phosphate diester (6:2/8:2-diPAP)	943913-15-3	mg/kg	0.1
Bis[2-(perfluorooctyl)ethyl] Phosphate/ 8:2 Fluorotelomer phosphate diester (8:2-diPAP)	678-41-1	mg/kg	0.1
Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2 diPAP-Na) *	114519-85-6	mg/kg	0.1
N-[(heptadecafluorooctyl)sulfonyl]-N-methylglycine (N-MeFOSAA)	2355-31-9	mg/kg	0.01
N-Ethyl-N-[(heptadecafluorooctyl)sulphonyl]glycine (N-EtFOSAA)	2991-50-6	mg/kg	0.01
Perfluorooctadecanoic acid (PFODA)	16517-11-6	mg/kg	0.01
Perfluorononane sulfonic acid (PFNS)	68259-12-1	mg/kg	0.01
Sodium perfluoro-1-nonanesulfonate (PFNS-Na) *	98789-57-2	mg/kg	0.01
ammonium nonadecafluorononanesulphonate (PFNS-NH <sub>4</sub> ) *	17202-41-4	mg/kg	0.01
Perfluorononanesulfonate potassium/Nonadecafluorononane-1-sulfonic acid potassium salt (PFNS-K) *	29359-39-5	mg/kg	0.01
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	mg/kg	0.1
N-Methylperfluoro-1-hexane sulfonamide (N-Me-FHxSA)	68259-15-4	mg/kg	0.01
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	mg/kg	0.01
Perfluoropentane-1-sulphonic acid (PFPeS)	2706-91-4	mg/kg	0.01
Sodium perfluoropentanesulfonate (PFPeS-Na) *	630402-22-1	mg/kg	0.01
Potassium perfluoropentane-1-sulphonate (PFPeS-K) *	3872-25-1	mg/kg	0.01
Bis(2-hydroxyethyl)ammonium perfluoropentanesulfonate *	70225-17-1	mg/kg	0.01
Ammonium perfluoropentanesulfonate (PFPeS-NH4) *	68259-09-6	mg/kg	0.01
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
Methyl pentadecafluorootanoate (MePFOA)	376-27-2	mg/kg	0.1
Ethyl perfluorooctanoate (EtPFOA)	3108-24-5	mg/kg	0.1
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2-FTA)	27905-45-9	mg/kg	0.1
Perfluorooctylethyl Methacrylate (8:2-FTMAC)	1996-88-9	mg/kg	0.1
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2-FTA)	17741-60-5	mg/kg	0.1
1H, 1H, 2H, 2H-Perfluorodecyldichloromethylsilane (C8-PFSi)	3102-79-2	mg/kg	0.1
8:2 Fluorotelomer olefin (8:2 FTO)	21652-58-4	mg/kg	0.1
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2-FTMAC)	2144-53-8	mg/kg	0.1
1H,1H,2H,2H-Perfluorooctyl acrylate (6:2-FTA)	17527-29-6	mg/kg	0.1
1H,1H-Pentadecafluorooctyl acrylate (7:1-FTA)	307-98-2	mg/kg	0.1
Perfluorooctyl iodide (PFOI)	507-63-1	mg/kg	0.1
1H,1H,2H,2H-Heptadecafluoro-1-iododecane (8:2-FTI)	2043-53-0	mg/kg	0.1
2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMA)	2144-54-9	mg/kg	0.1



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Substances	CAS No.	Unit	Reporting Limit
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	mg/kg	0.1
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	mg/kg	0.1
1H,1H,2H,2H-Nonafluorohexyl Methacrylate (4:2 FTMA)	1799-84-4	mg/kg	0.1
Perfluorohexyl iodide (PFHxI)	355-43-1	mg/kg	0.1
1H,1H-Pentadecafluoro-1-octanol (7:1 FTOH)	307-30-2	mg/kg	0.1
Heptafluorobutyramide (PFBA-NH <sub>2</sub> )	662-50-0	mg/kg	0.1
1H,1H,2H,2H-Perfluorooctyl iodide (6:2 FTI)	2043-57-4	mg/kg	0.1
1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTESi)	101947-16-4	mg/kg	0.1
2H-Perfluoro-2-decenoic acid (8:2 FTUCA)	70887-84-2	mg/kg	0.1
3-Perfluoropropyl propanoic acid (3:3 FTCA)	356-02-5	mg/kg	0.1
3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	mg/kg	0.1
2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	mg/kg	0.1
3-Perfluoroheptyl propanoic acid (7:3 FTCA)	812-70-4	mg/kg	0.1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	mg/kg	0.1
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	mg/kg	0.1
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	mg/kg	0.1
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	mg/kg	0.1
N-(3-(Dimethylamino)propyl)tridecafluorohexanesulphonamide (N-AP-FHxSA)	50598-28-2	mg/kg	0.1

<sup>\*</sup>The test result was reported as its related compound.

- (2) Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all above substances were less than reporting limit, the result is stated <RL.
- (3) According to Part A, Annex I to Regulation (EU) 2019/1021:

Substance	Scope	Maximum Permissible Limit
Perfluorooctane sulfonic acid and its derivatives (PFOS)	Substances or in preparations	≤ 10 mg/kg
	Semi-finished products or articles, or the part thereof	< 1000 mg/kg
	Textiles or other coated materials	< 1 μg/m²

- (4) Requirements according to Annex I part A of Regulation (EU) 2019/1021 (POPs) for Perfluorooctanoic acid and its salts amended by delegated Regulation (EU) 2020/784: Shall not, from 4 July 2020, be used in the production of, or placed on the market in:
  - a) Substances;
  - b) Mixtures;
  - c) Articles,



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in a concentration of maximum 0.025 mg/kg (0.0000025 % by weight) of perfluorooctanoic acid (PFOA) and its salts or maximum 1 mg/kg (0,0001 % by weight) of one or a combination of PFOA-related substances.

(5) Requirement according to the EU Commission published Regulation (EU) 2023/1608 amending Annex I of the POP Regulation (EU) 2019/1021 to restrict PFHxS, its salts and related compounds.

Shall not, from 28 August, 2023, be used in the production of, or placed on the market in(Excepting firefighting foam):

- a) Substances;
- b) Mixtures;
- c) Articles,
- in a concentration of maximum 0.025 mg/kg for PFHxS or any of its salts and maximum 1 mg/kg for the sum of PFHxS-related compounds.
- (6) Requirements according to Annex XVII of Regulation (EC) No 1907/2006 entry 68 (REACH) for perfluorinated carboxylic acids (C9-C14-PFCA) their salts and C9-C14-PFCA related substances amended by Regulation (EU) 2021/1297.

Shall not be used or placed on the market after 25 February 2023:

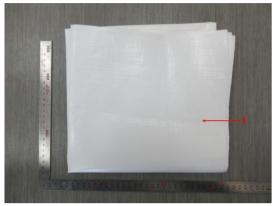
- (a) another substance, as a constituent;
- (b) in a mixture;
- (c) in an article,

except if the concentration in the substance, the mixture, or the article is below 25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances.



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# Sample Photos









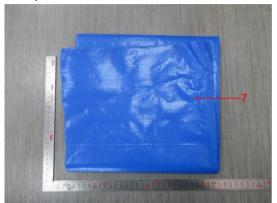


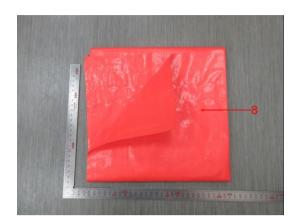


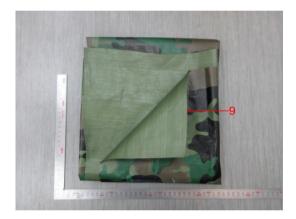


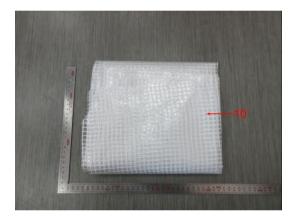
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# Sample Photos









- END -



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

Scope
These General Terms and Conditions of Business of TÜV Rhenland in Greater China ("CTCB") is made between the client and one or more member entities of TÜV Rhenland. In Greater China as applicable as the case may be ("TÜV Rhenland"). The Greater China here fere first Inhalland China, Hong Kong and Taiwan. The client hereof Includes:

a natural person capable to form legsly briding contracts under the applicable laws who concludes the contract not for the purpose of a daily use.

The contract of the purpose of a daily use.

The showing terms and conditions apply to agreed services including consultancy services, information, delevers and similar services as well as an actifically services and other secondary information, delevers and similar services as well as an actifically services and other secondary. Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly exclude. No standard contractal terms and conditions of the client of any nature shall not apply and shall hereby be expressly exclude. No standard contractal terms and conditions of the client all form part of the contract even if TÜV Rheinland does not explicitly object to them.

In the contact of an ongoing business reliativiship with the client, this CTCB shall also apply to individual case.

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.

### Coming into effect and duration of contracts

Coming into effect and duration of contracts

The contract shall once his offect for the agreed terms upon the quotation letter of TUV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being care their parties of the contraction of the co

3.3

### Scope of services

Scope of services

The scope and type of the services to be provided by TUV. Rhankand shall be specified in the contractually agreed services scope of TUV Rhankand exists, then the written confirmation of code by TUV. Rhankand shall be sopped to the scope of TUV Rhankand exists, then the written confirmation of orde by TUV Rhankand shall be decisive for the service to be provided. Unless otherwise agreed, services beyond the scope of the translation for the scope of the scope of the instance of the scope of the instance of the scope of the scope

4.3

particular, TÜV Rheinland hall assume no responsibility for the construction, selection of materials and assentity of installations examined, not be there used an application in accordance with regulations, unless these questions are expressly covered by the occurrance of the control of the case of the properties of the control of the case of the control of the control of the case of the

5.1 5.2

5.3

Performance periods/dates

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 TUR Perheland in writing, das hall not commence until the Internal Periods of the provided by the periods of the provided by the client. They shall not commence to TUR Perhelands.

Articles 5.1 and 5.2 also apply, even whole vegrees approval by the client, to all extensions of agreed periods/dates of performance not caused by TUR Perhelands.

Articles 5.1 and 5.2 also apply, even whole vegrees approval by the client, to all extensions of agreed periods/dates of performance not caused by TUR Perhelands are interested to the comment of the periods of the period of the periods of the perio

bite the client to comply with the legal and/or officially prescribed deadlines. TOV Rheinland urnes no responsibility in this respect unless TÜV Rheinland expressly agreed in writing clically stating that ensuring the deadlines is the contractual obligation of TÜV Rheinland.

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.

provided in good time and at no cost to TUV Rheinland.

Bedgin document, applies, suality at the c. recessary for performance of the services shall be bedgin document, applies, analysis, at the c. recessary for performance of the services shall be bedgin of the common of the client must be undertaken in accordance with legic provisions. Standards, safety regulations and accident prevention instructions. And the client represents and warrants that:

a) It has required statistically qualifications;
b) the product, service or management system to be certified complies with (in the common of the commo

Prices

If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price is sto TIV Priheinland valid at the time of performance. Unless otherwise agreed, work shall be invoiced according to the progress of the work.

Unless otherwise agreed, work shall be invoiced according to the progress of the work. If the execution of an order decides over more than one month and the value of the contract or the agreed facel price exceeds C2,200.00 or equivalent value in local currency, TUV Rheinland may demand payments on account or in establishments.

7.2 7.3

### Payment terms

invoice amounts shall be due for payment within 20 days of the invoice date without deduction receipt of the micros. No discounts and receipts of the micros. No discounts and receipts of the micros and client microse and client microse. If VID (President data) be microsed to client microse. If VID (President data) be microsed to client microsed to the microsed microsed to the microsed microsed to the microsed to t

untry where TDV Rheirland is located. At the same sure, ILV international manufacture damages, outsit the client default in payment of the invoice despite being granted a reasonable grace rout TDV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim regies for non-performance and relates to continue performance of the contract, under the contract of the contract.

Season of payment, commencement of insolvency proceedings against the claim's assets or see in which the commencement of insolvency proceedings has been dismissed due to lock of

assets.

Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.

TÜV Rheinland shall be entitled to demand appropriate advance payments.

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 shall come into feel to purchase or the contract of the shall come into feel (print of notice of changes in fees). Then their lines remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.

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 including but not limited to setoff against any fees paid by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland.

9.1

Any part of the work result ordered which is complete in itself may be presented by TUV Rheinland for acceptance as an installment. The client shall be obliged to accept it immediately. The client shall be obliged to accept it immediately. The client shall be obliged to accept it immediately. The client is not client shall be obliged to accept the street of the work. Vertice the client related be taken place two (2) weeks after completion and handower of the work. Vertice the client related acceptance within this period stating at least one furnimental breach of contract by TUV Pheinland. The client is not entitled to breaks exceptance due to inspirificant breach of contract by TUV. 9.2 9.3

9.4

The client is not entitled to instale acceptance due to insignment orderen or curieux by Livi Proheistand.

In excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.

During the Follow-Audit stage, if the client was unable to make use of the time windows provided for within the scope of a certification procedure for auditing/performance by TÜV Rheinland and the certificate is therefore to be withdrawn (e.g. performance of surveitance subsky) or if the client 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 prove that the TÜV Rheinland has incurred no damage witatiosever or only a considerably lower damage than the above turns sum. Insolder as the client has undertaken in the contract to score services. TÜV Rheinland shall also be 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 incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum. 9.5

9.6

10.1 10.2

Confidentiality

For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, documents, images, drawings, expertise, information, data, test results, reports, samples, reported, coursents, principa of the condition of the conditi

documentation purposes required by laws, regulations and the requirements of working procedures of TUP Rheinland. From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and shall not disclose this information to any thirt parties or use if for itself.

### Copyrights and rights of use, publications

TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, caciutations, presentations etc. prepared by TÜV Rheinland, unless otherwise agreed by the parties in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use

11.2 11.3

11.4

otherwise agreed by the parties in a sequence of the contraction of the contract of the contra

### Liability of TÜV Rheinland

Liability of TÜV Rheinland irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractan obligations or bot, the faibility of TÜV Rheinland for all damages, losses and shall be initied to. (i) in the case of a contract win a fixed overall fee, three times the overall fee for the entire contract. (ii) in the case of a contract or that seed overall fee, three times the overall fee for the entire contract. (ii) in the case of a contract or the service of the entire contract has a fixed or the entire contract. (ii) in the case of a contract expressly charged on a time and related basis, a maximum of that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Note this damage above, in the event that the botal and accumitated liability circulated according to the Norpelin provisions neceeds 2.5 or that the botal and accumitated liability circulated according to the Norpelin provisions neceeds 2.5 or the necessary of the necessary of the necessary of the Norpelin provisions necessary. The initiation of liability according to intrice 121 above, and into aday to campage and/or losses. The initiation of liability according to intrice 121 above, and into aday to campage and/or losses. In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose for a person devent, it breach of a notate contraction distillution of the necessary of the circumstances described in article to 100 km and the contract of the contract of the contract of the necessary of the circumstances described in article 100 km and the liable for the acts of the personnel made available by the clean to

breach (reasonably foreseeable damages), urless any of the circumsuress beaution in the 122 agplies.

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Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the clent.

The limitation periods for claims for damages shall be based on statutory provisions. None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client. 12.6 12.7

### Export control

12.2

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.

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 foreign trade legislations or embargos 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 incured thereof by TÜV Rheinland.

Data protection notice

The client understands and agrees that TIV Rheinland processes personal data (including but not have a controlled to the control of the client understands and agrees that TIV Rheinland processes personal data (including but not have been also also as a controlled to the client controlled to the client controlled to the client controlled to the controlled to the client controlled to the controlled to the client controlled to the contro

### Retention of test material and documentation

Retention of test material and documentation.

The test samples southhelds by the cent to TÜV Rheinland for testing will be scrapped following testing or will be returned to the client at the client's openies. The only exceptions are test samples, which are placed in storage on the basis of statutory regulations or of another agreement with the client.

If reference samples are stored at the premises of TÜV Rheinland. The cost of placing a test sample for storage with be disclosed to the client in the outstion.

If reference samples or documentations are given to the client to be placed in storage at their premises, the reference samples or concumentations are the made available to TÜV Rheinland of making available the reference samples and/or concentrations are visit to the placed in storage at their premises, the reference samples and/or documentation, any liability claims for material and pecuniary damage resulting from the respective testing and certification bat is brought forward by the client against TÜV Rheinland shall be voloide.

Given the cost of the handower and dispatch of the test samples for storage on the client's premises are cost of the handower and dispatch of the test samples for storage on the client's premises are the costs of the handower and dispatch of the test samples for storage on the client's premises are 15.3

15.4

15.5

16.2

Termination of the contract

Notehtstanding clause 3.3 of the GTCB, TUV Rheinland and the clear are entitled to terminate the contract in the entirety of, in the case of services combined in one contract, each of the contract and the clear of the contract individually and independently of the contraction of the remaining services with as (8) morehts rodge to the end of the contraction of the remaining services with as (8) morehts rodge to the end of the contraction of the remaining services with as (8) morehts rodge to the end of the contraction of the contr

entant in escape of a reference of monthing audite). Calculare the above accordingly.

Force Migure

Hardship

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

more corrows than could reasonably have been anticipated at the time of the conclusion of the Nobellhatandrop anapagin 1 of this Clause, where a Party proves that:

(ii) the continued performance of its contradual duties has become excessively orenous due to an event beyond in seasonable control which it could not reasonably have been expected to (b) it could not reasonably have been expected to (b) it could not reasonably have been expected to (c) it could not reasonably have avoided or overcome the event of its consequences, the Parties are bound, within a reasonable time of the invocation of the Clause, to negotiate alternative contractals terms which reasonably allow to overcome the consequences of the event.

Contractals terms a provided in that paragraph, the Party involving the Clause is entitled to terminate the contract, but cannot request adaptation by the judge or arbitrator without the agreement of the other Party.

### Partial invalidity, written form, place of jurisdiction and dispute resolutio

Partial invalidity, written form, place of jurisdiction and dispute resolution
All amendments and supplements must be in withing in order to be effective. This also applies to
amendments and supplements must be in withing in order to be control to the control of the control o 19.2

If TUT Rhenland in question is legally registered and existing in Hosp governed by the laws of beneby agree that the contract and these terms and contracts what the contract and these terms and contracts with the contract and these terms and contracts shall be governed by the laws of brong force.

If TUT Rhenland in question is legally registered and existing in Hosp Kong, the contract and these terms and conditions shall be governed by the laws of brong Kong.

Unless otherwise stipulated in the contract, and hose terms and conditions or the execution thereof shall be settled friendly through negligations.

Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the the dispose that be submitted:

in the case of TUV Rhenland in question being legally registered and existing in the Popule's Republic of China. to Chran International Economic and Times Architection Commission (CETAC) to submitted. The exhitation shall take piace in Seling, Shanghai, Sherchen or Chonging as appropriately chosen by the claiming pales or has a special contract of the contr