Test Report

Report No. A2250786387102003 Page 1 of 10

Company Name shown on Report	SHENZHEN TUOZHU TECHNOLOGY CO., LTD.
Address	903,WEST ZONE,HENGCHANG SCIENCE AND TECHNOLOGY BUILDING,NO.2228 LINHAI AVENUE,NANSHAN STREET,QIANHAI SHENGANG COOPERATION ZONE,SHENZHEN

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	PETG Basic
Model No.	G00-xx(xx stands for any suffix)
Sample Received Date	Oct. 24, 2025
Testing Period	Oct. 24, 2025 to Oct. 30, 2025

Test Conducted:

As requested by the applicant. For details refer to next page(s)

Approved by: Hill Zheng Date Oct. 30, 2025

Hill Zheng
Technical Manager

No. R855427184

Test Report

Executive Summary:

TEST REQUEST	CONCLUSION
Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)	
- Organic Tin compounds	**PASS**
- Polycyclic Aromatic Hydrocarbons (PAHs)	**PASS**
- Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) and their salts & related substances	**PASS**

********** For further details, please refer to the following page(s) **********

Test Report

Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)

▼**Organic Tin compounds**[#1]

Entry 20, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.552/2009 & No.276/2010

Test Method: Refer to ISO 17353:2004; Test Equipment: GC-MS

Tested Item(s)	Result [#] (mg/kg)	MDL (mg/kg)	Limit [#] (mg/kg)
	003		
Trimethyltin (TMT)	N.D.	1	--
Tributyl Tins (TBT)	N.D.	2	--
Tripropyltin (TPrT)	N.D.	3	--
Tricyclohexyltin (TCyT)	N.D.	3	--
Trioctyltin (TOT)	N.D.	1	--
Triphenyl Tins (TPhT)	N.D.	2	--
Tri-substituted Organostannic Compounds	N.D.	--	1000
Dibutyl Tins(DBT)	N.D.	3	1000
Dioctyl Tins(DOT)	N.D.	2	1000

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- 1000 mg/kg = 0.1%
- [#]: The test result(s) & limit are calculated by weight of tin.

▼**Polycyclic Aromatic Hydrocarbons (PAHs)**

Entry 50, annex XVII of European regulation (EC) No.1907/2006 (REACH) with amendments No.552/2009 & (EU) 2021/1199

Test Method: AfPS GS 2019:01 PAK; Test Equipment: GC-MS

Tested Item(s)	CAS No.	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		003		
Benzo[a]anthracene	56-55-3	N.D.	0.2	1
Chrysene	218-01-9	N.D.	0.2	1
Benzo[b]fluoranthene	205-99-2	N.D.	0.2	1
Benzo[k]fluoranthene	207-08-9	N.D.	0.2	1
Benzo[a]pyrene	50-32-8	N.D.	0.2	1
Dibenzo[a,h]anthracene	53-70-3	N.D.	0.2	1
Benzo[j]fluoranthene	205-82-3	N.D.	0.2	1
Benzo[e]pyrene	192-97-2	N.D.	0.2	1

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million

▼**Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) and their salts & related substances**[#1]

Entry 68, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment (EU) 2021/1297

Test Method: CEN/TS 15968:2010; Test Equipment: LC-MS-MS&GC-MS-MS

Tested Item(s)	CAS No.	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		003		
PFUnDA and its salts*	-	N.D.	0.010	--
PFDoDA and its salts*	-	N.D.	0.010	--
PFTrDA and its salts*	-	N.D.	0.010	--
PFTeDA and its salts*	-	N.D.	0.010	--
PFNA and its salts*	-	N.D.	0.010	--
PFDA and its salts*	-	N.D.	0.010	--
Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6	N.D.	0.010	--
Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) and their salts	-	N.D.	--	0.025
PFDS and its salts*	-	N.D.	0.010	--
1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1	N.D.	0.200	--

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Tested Item(s)	CAS No.	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		003		
1H,1H,2H,2H-Tetrahydroperfluorododecyl acrylate (10:2 FTA)	17741-60-5	N.D.	0.200	--
1H,1H,2H,2H-perfluoro-1-decanol (8:2 FTOH)	678-39-7	N.D.	0.200	--
8:2 FTS and its salts*	-	N.D.	0.200	--
1,1,2,2-Tetrahydroperfluorodecyl acrylate (8:2 FTAC)	27905-45-9	N.D.	0.200	--
2-Propenoic acid, 2-methyl-,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester (8:2 FTMA)	1996-88-9	N.D.	0.200	--
1H,1H,2H,2H-Perfluorodecyltriethoxysilane (PFSI)	101947-16-4	N.D.	0.200	--
Decane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iodo- (8:2 FTI)	2043-53-0	N.D.	0.200	--
8:2diPAP and its salts*	-	N.D.	0.200	--
2H,2H-Perfluorodecanoate (H_2PFDA)	27854-31-5	N.D.	0.010	--
Tetrabutylphosphonium 2H,2H-Perfluorodecanoate (H_2PFDA-P(C_4H_9)$_4$)	882489-14-7	N.D.	0.010	--
H_4PFUnA and its salts*	-	N.D.	0.010	--
10:2 FTS and its salts*	-	N.D.	0.200	--
Perfluorodecyl iodide (PFDI)	423-62-1	N.D.	0.200	--
Perfluorododecyl iodide (PFDoI)	307-60-8	N.D.	0.200	--
1H,1H,2H,2H-perfluorododecyl iodide (10:2 FTI)	2043-54-1	N.D.	0.200	--
1H,1H,2H,2H-perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	N.D.	0.200	--
2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMA)	2144-54-9	N.D.	0.200	--
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	N.D.	0.200	--
PFNS and its salts*	-	N.D.	0.010	--
PFDoDS and its salts*	-	N.D.	0.010	--
1-Decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (PFOE)	21652-58-4	N.D.	0.200	--
PFUnS and its salts*	-	N.D.	0.010	--
PFTrDS and its salts*	-	N.D.	0.010	--
10:2 monoPAPS and its salts*	-	N.D.	0.200	--
8:2 monoPAPS and its salts*	-	N.D.	0.200	--
2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4	N.D.	0.010	--
Perfluorodecylphosphonic acid (PFDPA)	52299-26-0	N.D.	0.010	--
2H,2H-Perfluorododecanoic acid (10:2 FTCA)	53826-13-4	N.D.	0.010	--
Alcohols, C8-14, gamma-omega-perfluoro (C8-14-PFEtOH)	68391-08-2	N.D.	0.200	--
1H,1H,2H,2H-Perfluorodecyl acetate (8:2FTOAc)	37858-04-1	N.D.	0.200	--
1H,1H,2H,2H-Perfluorododecyl acetate (10:2FTOAc)	37858-05-2	N.D.	0.200	--

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Tested Item(s)	CAS No.	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		003		
Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) related substances	-	N.D.	--	0.26

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- * = The substances listed in the List of C9-C14 PFCAs and their salts & related substances
- According to the entry 68 of the European regulation (EC) No. 1907/2006 (REACH) Annex XVII, C9-C14 PFCAs and their salts and related substances are defined as a class of chemicals. There is not an official list in the regulation. The conclusion is based on the tested chemicals.

List of C9-C14 PFCAs and their salts & related substances

No.	Group Name	Substance Name(s)	CAS No.
Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) and their salts			
1	PFUnDA and its salts	Perfluoroundecanoic acid (PFUnDA)	2058-94-8
2		Sodium perfluoroundecanoate (PFUnDA-Na)	60871-96-7
3		Potassium perfluoroundecanoate (PFUnDA-K)	30377-53-8
4		Calcium perfluoroundecanoate (PFUnDA-Ca)	97163-17-2
5		Ammonium perfluoroundecanoate (PFUnDA-NH_4)	4234-23-5
6		Perfluoroundecanoate (anion) (PFUnDA (anion))	196859-54-8
7	PFDoDA and its salts	Perfluorododecanoic acid (PFDoDA)	307-55-1
8		Sodium perfluoro-n-dodecanoic acid (PFDoDA-Na)	307-67-5
9		Ammonium tricosafluorododecanoate (PFDoDA-NH_4)	3793-74-6
10		Perfluorododecanoate (anion) (PFDoDA (anion))	171978-95-3
11	PFTrDA and its salts	Perfluorotridecanoic acid (PFTrDA)	72629-94-8
12		Sodium perfluorotridecanoate (PFTrDA-Na)	60872-01-7
13		Ammonium perfluorotridecanoate (PFTrDA-NH_4)	4288-72-6
14		Perfluorotridecanoate (anion) (PFTrDA (anion))	862374-87-6
15	PFTeDA and its salts	Perfluorotetradecanoic acid (PFTeDA)	376-06-7
16		Perfluorotetradecanoate (anion) (PFTeDA (anion))	365971-87-5
17	PFNA and its salts	Perfluorononanoic acid (PFNA)	375-95-1
18		Sodium heptadecafluorononanoate (PFNA-Na)	21049-39-8
19		Potassium perfluorononanoate (PFNA-K)	21049-38-7
20		Silver perfluorononanoate (PFNA-Ag)	7358-16-9
21		Lithium heptadecafluorononanoate (PFNA-Li)	60871-92-3
22		Perfluorononanoate ammounium salt (PFNA-NH_4)	4149-60-4
23		Cyclohexanaminium perfluorononanoate (PFNA-NH(C_6H_{12}))	328531-06-2
24		Piperidinium perfluorononanoate (PFNA-NH(C_5H_{11}))	95682-66-9
25		Methanaminium perfluorononanoate (PFNA-NH_3(CH_3))	77032-23-6
26		Nonanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-,compd. with N-ethylethanamine (1:1) (PFNA-NH_2(C_2H_5)$_2$)	77032-27-0
27		Nonanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-,compd. with N-methylmethanamine (1:1) (PFNA-NH_2(CH_3)$_2$)	77032-24-7

28		Nonanoic acid, heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (9CI) (PFNA-NH(C_2H_5)$_3$)	327176-80-7
29		Nonanoic acid,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with benzenamine (1:1) (PFNA-NH_3(C_6H_5))	95682-67-0
30		4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium heptadecafluorononanoate (PFNA-$C_{11}H_{12}N_4O_3S$)	298703-33-0
31		Perfluorononanoic anhydride (PFNAA)	228407-54-3
32		Perfluorononanoate (anion) (PFNA (anion))	72007-68-2
33		Heptadecafluorononanoyl fluoride (PFNA-F)	558-95-2
34		Perfluorononanoyl chloride (PFNA-Cl)	52447-23-1
35	PFDA and its salts	Perfluorodecanoic acid (PFDA)	335-76-2
36		Sodium nonadecafluorodecanoate (PFDA-Na)	3830-45-3
37		Perfluorodecanoate ammonium salt (APFDA)	3108-42-7
38		Potassium perfluorodecanoate (PFDA-K)	51604-85-4
39		Silver perfluorodecanoate (PFDA-Ag)	5784-82-7
40		Lithium perfluorodecanoate (PFDA-Li)	84743-32-8
41		Perfluorodecanoic anhydride (PFDAA)	942199-24-8
42		Perfluorodecanoate (anion) (PFDA (anion))	73829-36-4
43		Nonadecafluorodecanoyl chloride (PFDA-Cl)	307-38-0
44	--	Perfluoro-3,7-dimethyloctanoic acid (PF-3,7-DMOA)	172155-07-6
Linear and branched perfluorocarboxylic acids (C9-C14 PFCAs) related substances			
45	PFDS and its salts	Henicosafluorodecanesulphonic acid (PFDS)	335-77-3 126105-34-8
46		Perfluorodecanesulfonate NA-salt (PFDS-Na)	2806-15-7
47		Perfluorodecanesulfonate K-salt (PFDS-K)	2806-16-8
48		Perfluoroaliphatic Dean-sulfonate salt of NH_4 (PFDS-NH_4)	67906-42-7
49		Perfluorodecane sulfonic anhydride (PFDSA)	51667-62-0
50		Perfluorodecanesulphonyl fluoride (PFDS-F)	307-51-7
51		Perfluorodecanesulphonyl chloride (PFDS-Cl)	32779-61-6
52	--	1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1
53	--	1H,1H,2H,2H-Tetrahydroperfluorododecyl acrylate (10:2 FTA)	17741-60-5
54	--	1H,1H,2H,2H-perfluoro-1-decanol (8:2 FTOH)	678-39-7
55	8:2 FTS and its salts	1H,1H,2H,2H-perfluorodecane sulfonic acid (8:2 FTS)	39108-34-4
56		1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium (8:2 FTS-Na)	27619-96-1
57		Potassium 2-(perfluorooctyl)ethane-1-sulfonate (8:2 FTS-K)	438237-73-1
58		8:2 Fluorotelomer sulfonate ammonium salt (8:2 FTS-NH_4)	149724-40-3
59		2-(Perfluorooctyl)ethane-1-sulfonate (8:2 FTS (anion))	481071-78-7
60		2-(Perfluorooctyl)ethanesulfonyl chloride (8:2 FTS-Cl)	27619-90-5
61	--	1,1,2,2-Tetrahydroperfluorodecyl acrylate (8:2 FTAC)	27905-45-9
62	--	2-Propenoic acid,2-methyl-,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester (8:2 FTMA)	1996-88-9
63	--	1H,1H,2H,2H-Perfluorodecyltriethoxysilane (PFSI)	101947-16-4
64	--	Decane,1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-10-iodo- (8:2 FTI)	2043-53-0
65	8:2diPAP and its salts	8:2 Fluorotelomer phosphate diester (8:2diPAP)	678-41-1
66		Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)	114519-85-6
67		Ammonium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-NH_4)	93776-20-6
68		Bis(2-hydroxyethyl)ammonium bis((perfluorooctyl)ethyl) hydrogen phosphate (8:2diPAP-$C_4H_{11}NO_2$)	57677-97-1
69		8:2 Fluorotelomer phosphate diester ion (1-) (8:2diPAP (anion))	1411713-91-1

70	--	2H,2H-Perfluorodecanoate (H_2PFDA)	27854-31-5
71	--	Tetrabutylphosphonium 2H,2H-Perfluorodecanoate (H_2PFDA-$P(C_4H_9)_4$)	882489-14-7
72	H_4PFUnA and its salts	2H,2H,3H,3H-Perfluoroundecanoic acid (H_4PFUnA)	34598-33-9
73		Potassium 3-(perfluorooctyl)propanoate (H_4PFUnA-K)	83310-58-1
74		Lithium 3-(perfluorooctyl)propanoate (H_4PFUnA-Li)	67304-23-8
75	10:2 FTS and its salts	1H,1H,2H,2H-Perfluorododecanesulphonicacid (10:2 FTS)	120226-60-0
76		1H,1H,2H,2H-Perfluorododecanesulfonic Acid Sodium (10:2 FTS-Na)	108026-35-3
77		2-(Perfluorodecyl)ethane-1-sulfonyl chloride (10:2 FTS-Cl)	27619-91-6
78	--	Perfluorodecyl iodide (PFDI)	423-62-1
79	--	Perfluorododecyl iodide (PFDoI)	307-60-8
80	--	1H,1H,2H,2H-perfluorododecyl iodide (10:2 FTI)	2043-54-1
81	--	1H,1H,2H,2H-perfluorotetradecyl iodide (12:2 FTI)	30046-31-2
82	--	2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMA)	2144-54-9
83	--	1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5
84	PFNS and its salts	Perfluorononane sulfonic acid (PFNS)	68259-12-1
85		Sodium Perfluoro-1-nonanesulfonate (PFNS-Na)	98789-57-2
86		Perfluorononanesulfonate potassium (PFNS-K)	29359-39-5
87		Ammonium perfluorononanesulfonate (PFNS-NH_4)	17202-41-4
88		Perfluorononane sulfonate (anion) (PFNS (anion))	474511-07-4
89		Perfluorononanesulfonyl fluoride (PFNS-F)	68259-06-3
90	PFDoDS and its salts	Perfluorododecanesulfonic acid (PFDoDS)	79780-39-5
91		Sodium perfluoro-1-dodecanesulfonate (PFDoDS-Na)	1260224-54-1
92		Potassium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-pentacosafluorododecane-1-sulphonate (PFDoDS-K)	85187-17-3
93		Perfluorododecanesulfonate (PFDoDS(anion))	343629-43-6
94	--	1-Decene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (PFOE)	21652-58-4
95	PFUnS and its salts	Perfluoroundecane sulfonic acid (PFUnS)	749786-16-1
96		Sodium perfluoro-1-undecanesulfonate (PFUnS-Na)	-
97		Perfluoroundecanesulfonate (PFUnS(anion))	441296-91-9
98	PFTrDS and its salts	Perfluorotridecanesulfonic acid (PFTrDS)	791563-89-8
99		Sodium perfluorotridecanesulfonate (PFTrDS-Na)	174675-49-1
100	10:2 monoPAPS and its salts	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl dihydrogen phosphate (10:2 monoPAPS)	57678-05-4
101		10:2 Fluorotelomer diammonium dihydrogen phosphate (10:2 monoPAPS-NH_4NH_4)	93857-45-5
102		3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl dihydrogen phosphate cyclohexylamine	2514858-66-1
103	8:2 monoPAPS and its salts	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl dihydrogen phosphate (8:2 monoPAPS)	57678-03-2
104		Sodium 1H,1H,2H,2H-perfluorodecyl phosphate (8:2 monoPAPS-Na)	92678-93-8
105		Disodium 1H,1H,2H,2H-perfluorodecylphosphate (8:2 monoPAPS-Na_2)	438237-75-3
106		8:2 Fluorotelomer diammonium phosphate (8:2 monoPAPS-NH_4NH_4)	93857-44-4
107	--	2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4
108	--	Perfluorodecylphosphonic acid (PFDPA)	52299-26-0
109	--	2H,2H-Perfluorododecanoic acid (10:2 FTCA)	53826-13-4
110	--	Alcohols, C8-14, gamma-omega-perfluoro (C8-14-PFEtOH)	68391-08-2
111	--	1H,1H,2H,2H-Perfluorodecyl acetate (8:2FTOAc)	37858-04-1
112	--	1H,1H,2H,2H-Perfluorododecyl acetate (10:2FTOAc)	37858-05-2

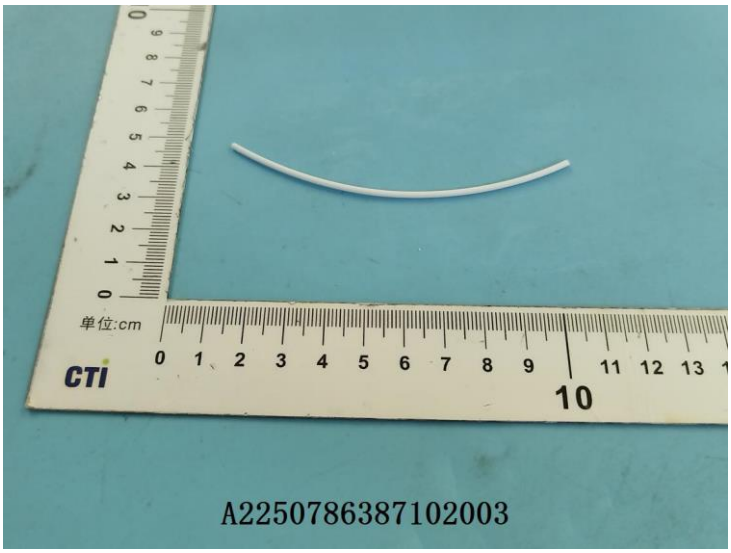
Sample/Part Description

No.	CTI Sample ID	Description
1	003	White plastic

Note:

- "#1" indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
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*** End of Report ***