



Test
TS EN ISO/IEC 17025
AB-0342-T

AB-0342-T

144444126

09/26

TÜV Rheinland
Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.
Saniye Ermutlu Sokak Çolakoğlu Plaza B Blok No :12 Kozyatağı-İSTANBUL

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Test Report

TANPAK AMBALAJ SANAYİ VE TİCARET LIMITED ŞİRKETİ

Çoraklar Mah. 5006 sk. No:6
Aliağa Organize Sanayi Bölgesi, 35800 Aliağa / İzmir

Report No. 144444126

Buyer /

Test Item. : Polyester Strapping / Composite Strapping / Holt Melt Strapping / Black PP Strapping / White PP Strapping

Lot No. : Black PP 12X0.65 - White PP 12X0.60 - Textile 13ST - pet 12x0.65 - Composite 16ST

Manufacturer : /

Fiber Content. : /

Colour Name. : /

Article No. : /

Test Specification : Test results have been evaluated acc.to EU Regulation 2025/40 (PPWR)

Applicant's Provided Care Instruction/Label: -

Sample Receiving date: 2026-08-26

Testing Period: 2026-08-27 to 2026-09-03

Report Date: 2026-09-03

Test Result: Pass

TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş. accredited by TÜRKAK under registration number AB-0342-T for ISO/IEC 17025-2017 as test laboratory

The Turkish Accreditation Agency (TÜRKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of the test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following, pages which are part of this report

For and on behalf of
TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.

Nalan Aslantas / CR Assistant
Manager & Project Manager

Kivanc Karatas / Chemical
Laboratory Manager

TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.

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The results given in this report belong to the received sample by vendor.

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This test report is signed by digital signature.

TÜV Rheinland testing laboratories apply the Zero Guard band rule for statement of conformity evaluation, unless other decision rule is required by the customer.

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Test Result Summary :

Test Specification:

1 Per-and polyfluoroalkyl substances(PFAS) #

2 Total fluorine content #

3 Toxic in Packaging Clearinghouse (TPCH) / Packaging Waste Heavy Metal Test

Test result:

PASS

PASS

PASS

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1. Photo



2. List of Materials

Material List:

Material No.	Material	Color	Location
M001	Plastic	Black	A-Main base-12x065
M002	Plastic	White	B-Main base-16st
M003	Textile	White	C-Main base-13st
M004	Plastic	White	D-Main base-65
M005	Plastic	Green	E-Main base

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1.Per-and polyfluoroalkyl substances(PFAS) #

Test Method: Textiles and other materials (excluding polymers): EN 17681-1:2025
Leather: EN ISO 23702-1:2023
Polymers: EN ISO 23702-1:2023 using THF extraction followed by methanol precipitation (1:1).

Test Result:

Test No.					T001	T002
Material No.					M001	M002
Test Parameter	CAS NO	Unit	RL	Customer's requirement	Result	Result
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9	ppb	10	25	n.d.	n.d.
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3	ppb	10	25	n.d.	n.d.
Didecylmethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8	ppb	10	25	n.d.	n.d.
Sum of PFOS and Its Salts	-	ppb	10	25	n.d.	n.d.
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2	ppb	10	25	n.d.	n.d.
N-methylperfluoro-1-octanesulfonamide (Me-FOSA)	31506-32-8	ppb	10	25	n.d.	n.d.
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2	ppb	10	25	n.d.	n.d.
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-07	ppb	10	25	n.d.	n.d.
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7	ppb	10	25	n.d.	n.d.
Perfluorooctane sulfonamide (PFOSA)	754-91-6	ppb	10	25	n.d.	n.d.
Sum of PFOS and related substances	-	ppb	10	25	n.d.	n.d.
Perfluorooctanoic acid (PFOA)	335-67-1	ppb	10	25	n.d.	n.d.
Sodium perfluorooctanoate (PFOA-Na)	335-95-5	ppb	10	25	n.d.	n.d.
Potassium perfluorooctanoate (PFOA-K)	2395-00-8	ppb	10	25	n.d.	n.d.
Silver perfluorooctanoate (PFOA-Ag)	335-93-3	ppb	10	25	n.d.	n.d.
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	ppb	10	25	n.d.	n.d.
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	ppb	10	25	n.d.	n.d.
Sum of PFOA and Its Salts	-	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	ppb	10	25	n.d.	n.d.
Methyl Perfluorooctanoate (Me-PFOA)	376-27-2	ppb	10	25	n.d.	n.d.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	ppb	10	25	n.d.	n.d.
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	ppb	10	25	n.d.	n.d.

1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	ppb	10	25	n.d.	n.d.
2H,2H-Perfluorodecanoic acid (H2PFDA)	27854-31-5	ppb	10	25	n.d.	n.d.
Sum of PFOA-related substances	-	ppb	10	25	n.d.	n.d.
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	3871-99-6	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	68259-08-5	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	82382-12-5	ppb	10	25	n.d.	n.d.
Sum of PFHxS and Its Salts	-	ppb	10	25	n.d.	n.d.
N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	68259-15-4	ppb	10	25	n.d.	n.d.
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	ppb	10	25	n.d.	n.d.
Sum of PFHxS-related substances	-	ppb	10	25	n.d.	n.d.
Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	ppb	10	25	n.d.	n.d.
Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	ppb	10	25	n.d.	n.d.
Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	ppb	10	25	n.d.	n.d.
Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	ppb	10	25	n.d.	n.d.
Perfluorotridecanoic Acid (PFTTrDA, C13-PFCA)	72629-94-8	ppb	10	25	n.d.	n.d.
Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	ppb	10	25	n.d.	n.d.
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	ppb	10	25	n.d.	n.d.
Sum of C9-C14 PFCA and Their Salts	-	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	ppb	10	25	n.d.	n.d.
2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)	34598-33-9	ppb	10	25	n.d.	n.d.
Perfluorocycloethanol 8:2 (8:2 FTOH)	678-39-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	ppb	10	25	n.d.	n.d.
Sum of C9-C14 PFCA-related Substances	-	ppb	10	25	n.d.	n.d.
Perfluorohexanoic Acid (PFHxA, C6-PFCA) and its salts	307-24-4, various	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	647-42-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	17527-29-6	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	ppb	10	25	n.d.	n.d.

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Sum of PFHxA-related substances	-	ppb	10	250	n.d.	n.d.
Conclusion					Pass	Pass

Test No.					T003	T004
Material No.					M003	M004
Test Parameter	CAS NO	Unit	RL	Customer's requirement	Result	Result
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9	ppb	10	25	n.d.	n.d.
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8	ppb	10	25	n.d.	n.d.
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3	ppb	10	25	n.d.	n.d.
Didecyl dimethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8	ppb	10	25	n.d.	n.d.
Sum of PFOS and Its Salts	-	ppb	10	25	n.d.	n.d.
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2	ppb	10	25	n.d.	n.d.
N-methylperfluoro-1-octanesulfonamide (Me-FOSA)	31506-32-8	ppb	10	25	n.d.	n.d.
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2	ppb	10	25	n.d.	n.d.
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-07	ppb	10	25	n.d.	n.d.
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7	ppb	10	25	n.d.	n.d.
Perfluorooctane sulfonamide (PFOSA)	754-91-6	ppb	10	25	n.d.	n.d.
Sum of PFOS and related substances	-	ppb	10	25	n.d.	n.d.
Perfluorooctanoic acid (PFOA)	335-67-1	ppb	10	25	n.d.	n.d.
Sodium perfluorooctanoate (PFOA-Na)	335-95-5	ppb	10	25	n.d.	n.d.
Potassium perfluorooctanoate (PFOA-K)	2395-00-8	ppb	10	25	n.d.	n.d.
Silver perfluorooctanoate (PFOA-Ag)	335-93-3	ppb	10	25	n.d.	n.d.
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	ppb	10	25	n.d.	n.d.
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	ppb	10	25	n.d.	n.d.
Sum of PFOA and Its Salts	-	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	ppb	10	25	n.d.	n.d.
Methyl Perfluorooctanoate (Me-PFOA)	376-27-2	ppb	10	25	n.d.	n.d.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	ppb	10	25	n.d.	n.d.
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	ppb	10	25	n.d.	n.d.
2H,2H-Perfluorodecanoic acid (H2PFDA)	27854-31-5	ppb	10	25	n.d.	n.d.

Sum of PFOA-related substances	-	ppb	10	25	n.d.	n.d.
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	3871-99-6	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	68259-08-5	ppb	10	25	n.d.	n.d.
Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	82382-12-5	ppb	10	25	n.d.	n.d.
Sum of PFHxS and Its Salts	-	ppb	10	25	n.d.	n.d.
N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	68259-15-4	ppb	10	25	n.d.	n.d.
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	ppb	10	25	n.d.	n.d.
Sum of PFHxS-related substances	-	ppb	10	25	n.d.	n.d.
Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	ppb	10	25	n.d.	n.d.
Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	ppb	10	25	n.d.	n.d.
Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	ppb	10	25	n.d.	n.d.
Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	ppb	10	25	n.d.	n.d.
Perfluorotridecanoic Acid (PFTrDA, C13-PFCA)	72629-94-8	ppb	10	25	n.d.	n.d.
Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	ppb	10	25	n.d.	n.d.
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	ppb	10	25	n.d.	n.d.
Sum of C9-C14 PFCA and Their Salts	-	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	ppb	10	25	n.d.	n.d.
2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)	34598-33-9	ppb	10	25	n.d.	n.d.
Perfluorocycloethanol 8:2 (8:2 FTOH)	678-39-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	ppb	10	25	n.d.	n.d.
Sum of C9-C14 PFCA-related Substances	-	ppb	10	25	n.d.	n.d.
Perfluorohexanoic Acid (PFHxA, C6-PFCA) and its salts	307-24-4, various	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	647-42-7	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	17527-29-6	ppb	10	25	n.d.	n.d.
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	ppb	10	25	n.d.	n.d.
Sum of PFHxA-related substances	-	ppb	10	250	n.d.	n.d.
Conclusion					Pass	Pass

Test No.					T005
Material No.					M005
Test Parameter	CAS NO	Unit	RL	Customer's requirement	Result
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	ppb	10	25	n.d.
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3	ppb	10	25	n.d.
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	ppb	10	25	n.d.
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9	ppb	10	25	n.d.
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8	ppb	10	25	n.d.
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3	ppb	10	25	n.d.
Didecylmethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8	ppb	10	25	n.d.
Sum of PFOS and Its Salts	-	ppb	10	25	n.d.
N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA)	4151-50-2	ppb	10	25	n.d.
N-methylperfluoro-1-octanesulfonamide (Me-FOSA)	31506-32-8	ppb	10	25	n.d.
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE)	1691-99-2	ppb	10	25	n.d.
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE)	24448-09-07	ppb	10	25	n.d.
Perfluoro-1-octanesulfonyl fluoride (POSF)	307-35-7	ppb	10	25	n.d.
Perfluorooctane sulfonamide (PFOA)	754-91-6	ppb	10	25	n.d.
Sum of PFOS and related substances	-	ppb	10	25	n.d.
Perfluorooctanoic acid (PFOA)	335-67-1	ppb	10	25	n.d.
Sodium perfluorooctanoate (PFOA-Na)	335-95-5	ppb	10	25	n.d.
Potassium perfluorooctanoate (PFOA-K)	2395-00-8	ppb	10	25	n.d.
Silver perfluorooctanoate (PFOA-Ag)	335-93-3	ppb	10	25	n.d.
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	ppb	10	25	n.d.
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	ppb	10	25	n.d.
Sum of PFOA and Its Salts	-	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	ppb	10	25	n.d.
Methyl Perfluorooctanoate (Me-PFOA)	376-27-2	ppb	10	25	n.d.
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	ppb	10	25	n.d.
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	ppb	10	25	n.d.
2H,2H-Perfluorodecanoic acid (H ₂ PFDA)	27854-31-5	ppb	10	25	n.d.
Sum of PFOA-related substances	-	ppb	10	25	n.d.
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	ppb	10	25	n.d.
Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	3871-99-6	ppb	10	25	n.d.

Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9	ppb	10	25	n.d.
Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	68259-08-5	ppb	10	25	n.d.
Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	82382-12-5	ppb	10	25	n.d.
Sum of PFHxS and Its Salts	-	ppb	10	25	n.d.
N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	68259-15-4	ppb	10	25	n.d.
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	ppb	10	25	n.d.
Sum of PFHxS-related substances	-	ppb	10	25	n.d.
Perfluorononanoic Acid (PFNA, C9-PFCA)	375-95-1	ppb	10	25	n.d.
Perfluorodecanoic Acid (PFDA, C10-PFCA)	335-76-2	ppb	10	25	n.d.
Perfluoroundecanoic Acid (PFUnA, C11-PFCA)	2058-94-8	ppb	10	25	n.d.
Perfluorododecanoic Acid (PFDoA, C12-PFCA)	307-55-1	ppb	10	25	n.d.
Perfluorotridecanoic Acid (PFTTrDA, C13-PFCA)	72629-94-8	ppb	10	25	n.d.
Perfluorotetradecanoic Acid (PFTeDA, C14-PFCA)	376-06-7	ppb	10	25	n.d.
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	ppb	10	25	n.d.
Sum of C9-C14 PFCAs and Their Salts	-	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	ppb	10	25	n.d.
2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA)	34598-33-9	ppb	10	25	n.d.
Perfluorocyclohexanol 8:2 (8:2 FTOH)	678-39-7	ppb	10	25	n.d.
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	ppb	10	25	n.d.
Sum of C9-C14 PFCA-related Substances	-	ppb	10	25	n.d.
Perfluorohexanoic Acid (PFHxA, C6-PFCA) and its salts	307-24-4, various	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27619-97-2	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorooctanol (6:2 FTOH)	647-42-7	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorooctyl acrylate (6:2 FTA)	17527-29-6	ppb	10	25	n.d.
1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMA)	2144-53-8	ppb	10	25	n.d.
Sum of PFHxA-related substances	-	ppb	10	250	n.d.
Conclusion					Pass

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Abbreviation: < = Less than
RL = Reporting Limit
mg/kg = milligram per kilogram
#This test is subcontracted to another TÜV R. location.

Remark:

- a Converted to PFOS
- b Converted to PFOA
- c Converted to 8:2 FTOH
- d Converted to PFHxS
- e Converted to 10:2 FTOH
- f Converted to 6:2 FTOH
- * Cannot be detected by the 17681-1:2025 alkaline hydrolysis method.
- ** Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all substances were not detected, the result is stated < RL.
- *** Per-and polyfluoroalkyl substances being tested according to AFIRM Restricted Substances List 2026.

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2.Total fluorine content #

Test Method: With reference to: Determination of halogen content according to DIN 53474 (digestion according to Wickbold) or DIN EN 62321-3-2 / DIN EN 14582 (digestion in oxygen digestion bomb), quantification by means of ion-selective electrode or ion chromatography according to DIN EN ISO 10304-1

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Test Result
T001	M001	Total fluorine content	mg/kg	10	25,0
T002	M002	Total fluorine content	mg/kg	10	n.d.
T003	M003	Total fluorine content	mg/kg	10	n.d.
T004	M004	Total fluorine content	mg/kg	10	35,0
T005	M005	Total fluorine content	mg/kg	10	n.d.

Abbreviation: < = less than
RL = Reporting Limit
mg/kg =milligram per kilogram
#This test is subcontracted to another TÜV R. location.
Requirement : 50 mg/kg

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3.Toxic in Packaging Clearinghouse (TPCH) / Packaging Waste Heavy Metal Test

Test Method: Sample digestion, analyzed by ICP-MS / Ultraviolet Visible Spectrophotometer (UV-Vis)

Result:

Test No.	Material No.	Test Parameters	Unit	RL	Regulatory Requirement	Result	Conclusion
T001	M001 + M002	Pb	mg/kg	10	-	n.d.	-
		Cd	mg/kg	10	-	n.d.	-
		Cr (VI)	mg/kg	10	-	n.d.	-
		Hg	mg/kg	10	-	n.d.	-
		Sum of Pb, Cd, Cr(VI) and Hg	mg/kg	10	100	n.d.	Pass
T002	M003	Pb	mg/kg	10	-	n.d.	-
		Cd	mg/kg	10	-	n.d.	-
		Cr (VI)	mg/kg	10	-	n.d.	-
		Hg	mg/kg	10	-	n.d.	-
		Sum of Pb, Cd, Cr(VI) and Hg	mg/kg	10	100	n.d.	Pass
T003	M004 + M005	Pb	mg/kg	10	-	n.d.	-
		Cd	mg/kg	10	-	n.d.	-
		Cr (VI)	mg/kg	10	-	n.d.	-
		Hg	mg/kg	10	-	n.d.	-
		Sum of Pb, Cd, Cr(VI) and Hg	mg/kg	10	100	n.d.	Pass

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Remark:

*** Single element with an amount of less than the detection limit were not considered by the calculation of the sum. In the case of all elements were not detected, the result is stated < RL

- END -