

Determination of per and poly fluorinated compounds (PFCs)

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et al.	HFPO-DA its salts and its acyl halides

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	25-05-2023
Based on	OEKO-TEX® (2022)
Deviation from the standard	
Extraction method	Methanol ultrasonic
Separation and detection	HPLC with ESI - LC/MS/MS
Results	
Determination limit	See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTriDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference:

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 Determination limit 0.10 mg/kg

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1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	17527-29-6	10:2 FTOH
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Determination limit	See table

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perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnA and its salts
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Reference: **PVC-recyclate**

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Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference: [REDACTED] PVC-recyclate [REDACTED]

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 25-05-2023
Based on OEKO-TEX® (2022)
Deviation from the standard
Extraction method Methanol ultrasonic
Separation and detection HPLC with ESI - LC/MS/MS
Results
Determination limit See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference: [REDACTED] - PVC-recyclate [REDACTED]

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 25-05-2023
 Based on OEKO-TEX® (2022)
 Extraction method Ultrasonic extraction with methanol
 Analytical method GC/MS/MS
 Results
 Determination limit 0.10 mg/kg

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference: [REDACTED] - PVC-recyclate [REDACTED]

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 25-05-2023
Based on OEKO-TEX® (2022)
Deviation from the standard
Extraction method Methanol ultrasonic
Separation and detection HPLC with ESI - LC/MS/MS
Results
Determination limit See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference: [REDACTED] - PVC-recyclate [REDACTED]

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 25-05-2023
Based on OEKO-TEX® (2022)
Extraction method Ultrasonic extraction with methanol
Analytical method GC/MS/MS
Results
Determination limit 0.10 mg/kg

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2.3.3.3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference: - PVC-recyclate

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 25-05-2023
Based on OEKO-TEX® (2022)
Deviation from the standard
Extraction method Methanol ultrasonic
Separation and detection HPLC with ESI - LC/MS/MS
Results
Determination limit See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHxA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m³)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	17-05-2023
Based on	OEKO-TEX® (2022)
Extraction method	Ultrasonic extraction with methanol
Analytical method	GC/MS/MS
Results	
Determination limit	0.10 mg/kg

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2.3.3.3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	17-05-2023
Based on	OEKO-TEX® (2022)
Deviation from the standard	
Extraction method	Methanol ultrasonic
Separation and detection	HPLC with ESI - LC/MS/MS
Results	
Determination limit	See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphononic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 17-05-2023
 Based on OEKO-TEX® (2022)
 Extraction method Ultrasonic extraction with methanol
 Analytical method GC/MS/MS
 Results
 Determination limit 0.10 mg/kg

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2.3.3.3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	17-05-2023
Based on	OEKO-TEX® (2022)
Deviation from the standard	
Extraction method	Methanol ultrasonic
Separation and detection	HPLC with ESI - LC/MS/MS
Results	
Determination limit	See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosaflluorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference: T2310684 - 23-0215/3 Winsa 302 (91022/3); extrusion Winsa Kartepe (TR)

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 17-05-2023
 Based on OEKO-TEX® (2022)
 Extraction method Ultrasonic extraction with methanol
 Analytical method GC/MS/MS
 Results
 Determination limit 0.10 mg/kg

Components	C (mg/kg)	CAS no	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< 0.10	2043-47-2	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		
Under observation			
Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference: T2310684 - 23-0215/3 Winsa 302 (91022/3); extrusion Winsa Kartepe (TR)

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 17-05-2023
Based on OEKO-TEX® (2022)
Deviation from the standard
Extraction method Methanol ultrasonic
Separation and detection HPLC with ESI - LC/MS/MS
Results
Determination limit See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et.al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et.al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et.al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et.al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et.al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et.al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et. al.	PFTeDA and its salts
perfluor-n-butanoic acid	< 0.010	375-22-4 et.al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et.al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et.al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et.al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et.al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et.al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et.al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et.al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et.al.	7HPFHxA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et.al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et.al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et.al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m³)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et.al.	PFOS and its sulfonates

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	17-05-2023
Based on	OEKO-TEX® (2022)
Deviation from the standard	
Extraction method	Methanol ultrasonic
Separation and detection	HPLC with ESI - LC/MS/MS
Results	
Determination limit	See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et al.	PFUnA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et al.	7HPFHpA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et al.	PFOS and its sulfonates

Reference: XXXXXXXXXX

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test 17-05-2023
 Based on OEKO-TEX® (2022)
 Extraction method Ultrasonic extraction with methanol
 Analytical method GC/MS/MS
 Results
 Determination limit 0.10 mg/kg

Components	C (mg/kg)	CAS no.	Acronym
1H,1H,2H,2H-perfluoro-1-hexanol	< XXXXXXXXXX	XXXXXXXXXX	4:2 FTOH
1H,1H,2H,2H-perfluoro-1-octanol	< 0.10	647-42-7	6:2 FTOH
* 1H,1H,2H,2H-perfluoro-1-decanol	< 0.10	678-39-7	8:2 FTOH
1H,1H,2H,2H-perfluoro-1-dodecanol	< 0.10	865-86-1	10:2 FTOH
1H,1H,2H,2H-perfluorooctyl acrylate	< 0.10	17527-29-6	6:2 FTA
* 1H,1H,2H,2H-perfluorodecyl acrylate	< 0.10	27905-45-9	8:2 FTA
1H,1H,2H,2H-perfluorododecyl acrylate	< 0.10	17741-60-5	10:2 FTA

* PFOA related substances

Perfluorooctane sulfonamide	< 1.0	754-91-6	PFOSA
Perfluorooctane sulfonfluoride	< 1.0	307-35-7	PFOSF/POSF
N-Methyl Perfluorooctane sulfonamide	< 1.0	31506-32-8	N-Me-FOSA
N-Ethyl Perfluorooctane sulfonamide	< 1.0	4151-50-2	N-Et-FOSA
N-Methyl Perfluorooctane sulfonamide ethanol	< 1.0	24448-09-7	N-Me-FOSE
N-Ethyl Perfluorooctane sulfonamide ethanol	< 1.0	1691-99-2	N-Et-FOSE
PFOS, PFOSA, PFOSF, N-Me-FOSA, N-Et-FOSA, N-Me-FOSE, N-Et-FOSE; Sum	< 1.0		

Under observation

Components	C (mg/kg)	CAS no	Acronym
2,3,3,3.-tetrafluoro-2-(heptafluoro propoxy)propionic acid	< 0.010	13252-13-, et.al.	HFPO-DA its salts and its acyl halides

Reference:

Determination of per and poly fluorinated compounds (PFCs)

Date of ending the test	17-05-2023
Based on	OEKO-TEX® (2022)
Deviation from the standard	
Extraction method	Methanol ultrasonic
Separation and detection	HPLC with ESI - LC/MS/MS
Results	
Determination limit	See table

Components	C (mg/kg)	CAS no	Acronym
perfluoro-n-octanoic acid	< 0.010	335-67-1, et.al.	PFOA and its salts
perfluoro-n-heptanoic acid	< 0.010	375-85-9, et.al.	PFHpA and its salts
perfluoro-n-nonanoic acid	< 0.010	375-95-1, et.al.	PFNA and its salts
perfluoro-n-decanoic acid	< 0.010	335-76-2, et.al.	PFDA and its salts
perfluoro-n-undecanoic acid	< 0.010	2058-94-8, et.al.	PFUnDA and its salts
perfluoro-n-dodecanoic acid	< 0.010	307-55-1, et.al.	PFDoA and its salts
perfluoro-n-tridecanoic acid	< 0.010	72629-94-8, et.al.	PFTTrDA and its salts
perfluoro-n-tetradecanoic acid	< 0.010	376-06-7, et.al.	PFTeDA and its salts
perfluoro-n-butanoic acid	< 0.010	375-22-4 et.al.	PFBA and its salts
perfluoro-n-pentanoic acid	< 0.010	2706-90-3, et.al.	PFPeA and its salts
perfluoro-n-hexanoic acid	< 0.010	307-24-4, et.al.	PFHxA and its salts
Perfluoro(3,7-dimethyloctanoic acid)	< 0.010	172155-07-6, et.al.	PF-3,7-DMOA and its salts
perfluoro-1-butane sulfonic acid	< 0.010	375-73-5; 59933-66-3, et.al.	PFBS and its salts
perfluoro-1-hexane sulfonic acid	< 0.010	355-46-4, et.al.	PFHxS and its salts
perfluoro-1-heptane sulfonic acid	< 0.010	375-92-8, et.al.	PFHpS and its salts
Heinicosafuorodecane sulfonic acid	< 0.010	335-77-3, et.al.	PFDS and its salts
7H-perfluoro heptanoic acid	< 0.010	1546-95-8, et.al.	7HPFHxA and its salts
2H,2H,3H,3H-perfluoroundecanoic acid	< 0.010	34598-33-9, et.al.	4HPFUnA and its salts
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	< 0.010	27619-97-2, et.al.	1H, 1H, 2H, 2H-PFOS and its salts
* 1H,1H,2H,2H-perfluorodecane sulphonic acid	< 0.010	39108-34-4, et.al.	8:2 FTS and its salts

* PFOA related substances

Components	C (µg/m²)	CAS no	Acronym
Perfluorooctane sulfonic acid	< 1.0	1763-23-1, et.al.	PFOS and its sulfonates



Your notice of
 28-04-2023

Your reference
 [REDACTED]

Date
 30-05-2023

Analysis Report

Required tests :

OEKO-TEX® (2022)

Determination of per and poly fluorinated compounds (PFCs)

Sample id	Information given by the client	Date of receipt
T2310682	[REDACTED]	28-04-2023
T2310683		28-04-2023
T2310684		28-04-2023
T2310685		28-04-2023
T2310686		28-04-2023
T2310687		28-04-2023
T2310688		28-04-2023
T2310689		28-04-2023
T2310690		28-04-2023
T2310691		28-04-2023
T2310692		28-04-2023
T2310693		28-04-2023
T2310694		28-04-2023

Order responsible

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 In assessing compliance with the specifications, we did not take into account the uncertainty on the test results.