SOT-23

DFN PDFN SOD-123/323/523/723/923/123FL SOP8/14/16/18/20/24 SOT-23 -XL /89 -XL /143/223/323/343/353/363/523/553/563/723 TO-92/92L/92S/92MOD/126/220 -XL /220A/220F/227/247/251/251S/252 -XL /263/277/3P TSSOP8 FBP CSP QFN TSOT WBFBP WBHFBP MSOP8 ESOP8 DIP8/14/16/18 SOP8PP SOP10 TSSOP14 ETSSOP16 WBLGA6×6-44L 6GBJ ABS DB DBS GBJ GBL GBP GBU JBF JBSL KBL KBP KBU KBJ MBF MBS SMA SMAF SMAG SMAJ SMB SMBF SMBG SMBJ SMC SMCG SMD R-1 R-6 A-405 DO-15 DO-27 DO-41 SOD-123HE TO-220F-B TO-220-2L TO-220F-2L TO-247-3L TO-247-2L TO-92K/126K/220AK/220BK/220CK/220FK/262K/263K/3PK/247K/252-2LK SOT-223-3LK SOT-23-3LK SOT-89K 4GBJ D3K UMSB

SGS SHP25-012568

2025 04 23

2025 04 23 ~ 2025 04 29

POPs (EU) 2019/1021 I	

Tom Ni

Scan to see the report

50B52C2C

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		SGS ID	
SN1	A1	SHA25-0093303-0001.C001	

(1) 1 mg/kg = 1 ppm = 0.0001%
(2) MDL=
(3) ND = (< MDL)
(4) "-" =

POPs (EU) 2019/1021 I

SGS - GC-MS GC-MS/MS GC-NCI-MS GC-ECD HPLC-DAD-MS LC-MS/MS

	CAS No.			MDL	A1
	40088-47-9	-	mg/kg	5	ND
	32534-81-9	-	mg/kg	5	ND
	36483-60-0	-	mg/kg	5	ND
	68928-80-3	-	mg/kg	5	ND
(decaBDE)	1163-19-5	-	mg/kg	5	ND
*	-	500	mg/kg	-	ND
PFOS					
(PFOS), ^	1763-23-1	-	mg/kg	0.010	ND
N- (N-EtFOSA)	4151-50-2	-	mg/kg	0.010	ND
N- (N-MeFOSA)	31506-32-8	-	mg/kg	0.010	ND
2-(N-) (N-EtFOSE)	1691-99-2	-	mg/kg	0.010	ND
2-(N-) (N-MeFOSE)	24448-09-7	-	mg/kg	0.010	ND
(PFOSA), ^	754-91-6	-	mg/kg	0.010	ND
N-(-1-) (FOSAA), ^	2806-24-8	-	mg/kg	0.010	ND
N- -N-(-1-) (N-MeFOSAA), ^	2355-31-9	-	mg/kg	0.010	ND
N- -N-(-1-) (N-EtFOSAA), ^	2991-50-6	-	mg/kg	0.010	ND
(PFOS)	-	1000	mg/kg	-	ND
	608-93-5		mg/kg	5	ND

	CAS No.			MDL	A1
(PCBs)	1336-36-3	50	mg/kg	5	ND
	36355-01-8		mg/kg	5	ND
(HBCDD) (α-HBCDD, β-HBCDD, γ-HBCDD)	134237-50-6, 134237-51-7, 134237-52-8, 25637-99-4, 3194-55-6	75	mg/kg	20	ND
	87-68-3		mg/kg	5	ND
(PCNs)	70776-03-3		mg/kg	5	ND
C10-13 ( ) (SCCPs)	85535-84-8	1500	mg/kg	50	ND
(PFOA), ^	335-67-1	0.025	mg/kg	0.010	ND
PFOA					
1H,1H,2H,2H- (8:2 FTS), ^	39108-34-4	1	mg/kg	0.010	ND
(Me-PFOA)	376-27-2	1	mg/kg	0.200	ND
(Et-PFOA)	3108-24-5	1	mg/kg	0.200	ND
1H,1H,2H,2H- (8:2 FTA)	27905-45-9	1	mg/kg	0.100	ND
1H,1H,2H,2H- (8:2 FTMA)	1996-88-9	1	mg/kg	0.100	ND
(PFOI)	507-63-1	1	mg/kg	0.200	ND
2H, 2H- (8:2 FTCA), ^	27854-31-5	1	mg/kg	0.010	ND
1H,1H,2H,2H- -1- (8:2 FTOH)	678-39-7	1	mg/kg	0.100	ND
1- -1H,1H,2H,2H- (8:2 FTI)	2043-53-0	1	mg/kg	0.100	ND
1H,1H,2H,2H- (8:2 FTSi(OC_2H_5)$_3$)	101947-16-4	1	mg/kg	0.100	ND
[2-( )] (8:2diPAP), ^	678-41-1	1	mg/kg	0.010	ND
2H, 2H, 3H, 3H- (8:3 FTCA), ^	34598-33-9	1	mg/kg	0.010	ND
(PFDE)	21652-58-4	1	mg/kg	0.100	ND
3- (7:3 FTCA)	812-70-4	1	mg/kg	0.010	ND
1H,1H,2H,2H- (8:2 FTSiCl_3)/ 1H,1H,2H,2H- (8:2 FTSi(OCH_3)$_3$)	78560-44-8 /83048-65-1	1	mg/kg	0.100	ND
2H- -2- (8:2 FTUCA)	70887-84-2	1	mg/kg	0.010	ND
6:8 (6:8 PFPi)	610800-34-5	1	mg/kg	0.010	ND
8:8 (8:8 PFPi, ^	40143-79-1	1	mg/kg	0.010	ND
1H,1H,2H,2H- (8:2 FTOAc)	37858-04-1	1	mg/kg	0.100	ND

	CAS No.			MDL	A1
[2-( )] (8:2 monoPAP), ^	57678-03-2	1	mg/kg	0.100	ND
PFOA	-	1	mg/kg	-	ND
(PFHxS) ^	355-46-4	0.025	mg/kg	0.010	ND
PFHxS					
N- -1- (N-Me-PFHxSA)	68259-15-4	1	mg/kg	0.010	ND
(PFHxSA)	41997-13-1	1	mg/kg	0.010	ND
N-[3-( )] (N-AP-FHxSA)	50598-28-2	1	mg/kg	0.010	ND
2-[[( )]] (N-MeFHSEA)	67584-57-0	1	mg/kg	0.200	ND
2-[[( )]]	67584-61-6	1	mg/kg	0.200	ND
2-[[( )]]	67906-70-1	1	mg/kg	0.200	ND
-N- (2-)-N- (MeFHxSE)	68555-75-9	1	mg/kg	0.010	ND
N- -N-[( )] (EtFHxSAA), ^	68957-32-4	1	mg/kg	0.010	ND
PFHxS	-	1	mg/kg	-	ND

(PFOS-K)	2795-39-3
(PFOS-Li)	29457-72-5
(PFOS-Na)	4021-47-0
(PFOS-NH_4)	29081-56-9
(PFOS-$NH_2(C_2H_4OH)_2$)	70225-14-8
(PFOS-$N(C_2H_5)_4$)	56773-42-3
(PFOS-$N(C_{10}H_{21})_2(CH_3)_2$)	251099-16-8
(PFOS-$N(C_4H_9)_4$)	111873-33-7
(PFOS-F)	307-35-7
[ ] (PFOS-Mg)	91036-71-4
	71463-74-6
	45298-90-6
(PFOS-$N(C_2H_5)_3$)	54439-46-2
(PFOS-$N(CH_3)_4$)	56773-44-5
N, N,N- -1- -1- (PFOS-$N(C_3H_7)_3(C_5H_{11})$)	56773-56-9
N,N- -N- -1- -1- (PFOS-$N(C_4H_9)_3(CH_3)$)	124472-68-0
[4-(1,1-)]- -1- (1:1)	213740-80-8
-1- (2,4,6-)	258341-99-0
-1- 1-	334529-63-4
N,N,N- -1- -1-	773895-92-4
(PFOS-P ($C_4H_9)_4$))	2185049-59-4
(PFOS-$C_4H_{11}N$)	2205029-08-7
-[2-(2- -2-)] (PFOS-$C_{15}H_{30}NO_2$)	1203998-97-3
(PFOSAN)	423-92-7
FOSAA,	
N-(-1-) (FOSAA)	2806-24-8
(FOSAA(anion))	909405-47-6
(FOSAA-K)	75260-69-4
(FOSAA-Na)	115716-87-5
N-MeFOSAA,	
N- -N-(-1-) (N-MeFOSAA)	2355-31-9
N-( )-N- (N-Me-FOSAA(anion))	909405-48-7
N-( )-N- (N-Me-FOSAA-K)	70281-93-5
N-EtFOSAA,	
N- -N-(-1-) (N-EtFOSAA)	2991-50-6
N- -N-[( )]- (N-Et-FOSAA-K)	2991-51-7
N- -N-(( )) (N-Et-FOSAA(anion))	909405-49-8
N- -N-(( )) (N-Et-FOSAA-NH_4)	2991-52-8
N- -N-(( )) (N-Et-FOSAA-Na)	3871-50-9
PFOSA,	
(PFOSA)	754-91-6
(1:1)(PFOSA-Li)	76752-79-9

(1:1) (PFOSA-Na)	76752-78-8
(1:1) (PFOSA-K)	76752-70-0
(1:1) (PFOSA-NH_4)	76752-72-2
(PFOSA-$C_6H_{15}N$)	76752-82-4
PFOA, &	
(PFOA)	335-67-1
(PFOA-Na)	335-95-5
(PFOA-K)	2395-00-8
(PFOA-Ag)	335-93-3
(PFOA-F)	335-66-0
(APFO)	3825-26-1
(PFOA-Li)	17125-58-5
(PFOA-Co)	35965-01-6
(PFOA-Cs)	17125-60-9
(3+) (PFOA-Cr(3+))	68141-02-6
- (2:1) (PFOA-$NH(C_4H_{10}N)$)	423-52-9
	45285-51-6
	33496-48-9
	98241-25-9
	32609-65-7
	277749-00-5
(PFOA-$K(H_2O)_2$)	98065-31-7
(PFOA-C_2H_7N)	1376936-03-6
(PFOA-C_5H_5N)	95658-47-2
(PFOA-$C_{10}H_{14}N_2$)	1514-68-7
(PFOA-$C_{11}H_{26}N$)	927835-01-6
8:2 FTS,	
1H,1H,2H,2H- (8:2 FTS)	39108-34-4
1H,1H,2H,2H- (8:2 FTS-K)	438237-73-1
1H,1H,2H,2H- (8:2 FTS-NH_4)	149724-40-3
1H,1H,2H,2H- (8:2 FTS-Na)	27619-96-1
1H,1H,2H,2H- (8:2 FTS(anion))	481071-78-7
8:2 FTCA,	
2H,2H- (8:2 FTCA)	27854-31-5
2H,2H- (8:2 FTCA-$P(C_4H_9)_4$)	882489-14-7
8:2diPAP,	
[2-( )] (8:2diPAP)	678-41-1
[2-( )] (8:2diPAP-Na)	114519-85-6
(2-) ( ))	57677-97-1
[2-( )] (8:2 diPAP-NH_4)	93776-20-6
8:2	1411713-91-1
8:3 FTCA,	
2H,2H,3H,3H- (8:3 FTCA)	34598-33-9

2H,2H,3H,3H- (8:3 FTCA-K)	83310-58-1
2H,2H,3H,3H- (8:3 FTCA-Li)	67304-23-8
8:8 PFPi,	
8:8 (8:8 PFPi)	40143-79-1
8:8 (8:8 PFPi-Na)	500776-69-2
8:8 (3+) (8:8 PFPi-Er)	500776-70-5
8:8 (3+) (8:8 PFPi-Yb)	500776-71-6
8:2 monoPAP,	
[2-( )] (8:2 monoPAP)	57678-03-2
8:2	93857-44-4
8:2	438237-75-3
[2-( )]	1764-95-0
[2-( )]	92401-44-0
[2-( )]	144965-22-0
[2-( )]	150033-28-6
[2-( )]	2353-52-8

(9) (PFHxS)

(a). 2023 8 8 (EU)2023/1608 2023 5 30
EU)2019/1021 I PFHxS) PFHxS

PFHxS		≤ 0.025 mg/kg
PFHxS		≤ 1 mg/kg (PFHxS)
PFHxS PFHxS		≤ 0.1 mg/kg (3)

(b). (PFHxS) PFHxS “
”

List of substances proposed as POPs - ECHA (europa.eu)

(c). ^= PFHxS /

	CAS No.
PFHxS, &	
(PFHxS)	355-46-4
(PFHxS-Na)	82382-12-5
(PFHxS-K)	3871-99-6
(1:1)(PFHxS-Li)	55120-77-9
(PFHxS-NH_4)	68259-08-5
( )- (PFHxS-BTPP)	1000597-52-3
N,N,N- -1- (PFHxS-N(C_4H_9)$_4$)	108427-54-9
N, N,N- (PFHxS-N(C_2H_5)$_4$)	108427-55-0
(PFHxS-NC_4H_9)	1187817-57-7

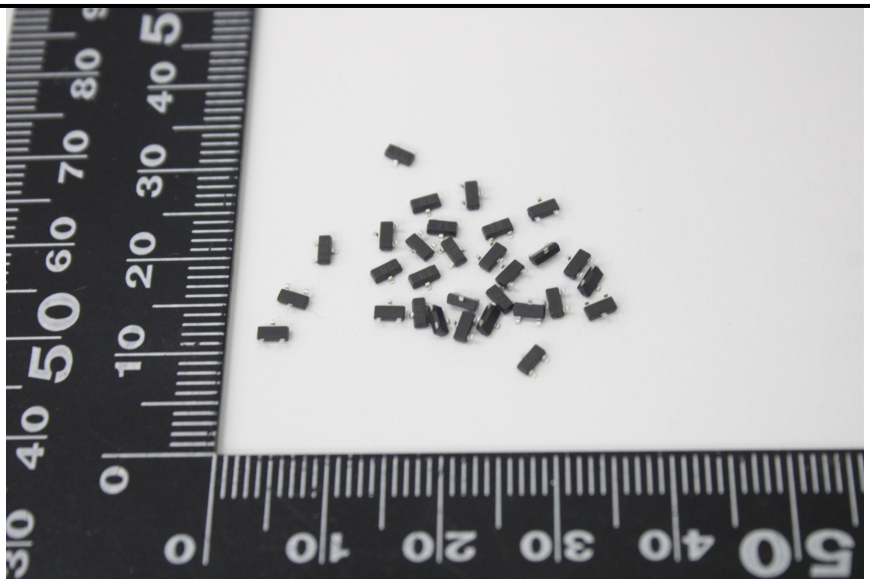
-1- -N-[4-[[4-( )][4-( )-1-]]-2,5- -1-]-N- - (PFHxS-$(NC_{10}H_{14})_3C_5H_4$)	1310480-24-0
-1- -N-[4-[[4-( )][4-( )-1-]]-2,5- -1-]-N- - (PFHxS-$(NC_8H_{10})_2C_{13}H_{12}$)	1310480-27-3
-1- -N-[4-[[4-( )][4-( )-1-]]-2,5- -1-]-N- - (PFHxS-$(NC_8H_{10})_2C_{17}H_{12}$)	1310480-28-4
β- (PFHxS-$C_{42}H_{70}O_{35}$)	1329995-45-0
γ- (PFHxS-$C_{48}H_{80}O_{40}$)	1329995-69-8
(TPS-PFHxS)	144116-10-9
, 1-( )-4-[2-[4-[4-(2,2-)]-1,2,3a,4,8b- [b] -7-]] (PFHxS-$C_{44}H_{37}N_2O_2$)	1462414-59-0
(PFHxS-$I(C_6H_5)_2$)	153443-35-7
N,N,N- - (PFHxS-TMA)	189274-31-5
2- -2- (1:1)(PFHxS-$NH_2(CH_3)_3$)	202189-84-2
[4-(1,1-)] (PFHxS-$I(C_6H_4)_2(C_4H_9)_2$)	213740-81-9
(9Cl)(PFHxS-Ga)	341035-71-0
(4-) (1:1)(PFHxS-$S(C_7H_7)_2C_6H_5$)	341548-85-4
(PFHxS-Sc)	350836-93-0
(PFHxS-Nd)	41184-65-0
(PFHxS-Y)	41242-12-0
(-4,1-) [ ] (PFHxS-$S_3(C_6H_5)_4(C_6H_4)_2$)	421555-73-9
[4-(1,1-)] (PFHxS-$I(C_6H_4)_2(C_5H_{11})_2$)	421555-74-0
(PFHxS-F)	423-50-7
[4-(1,1-)] (PFHxS-$S(C_6H_4)_3(C_4H_9)_3$)	425670-70-8
(PFHxS-Zn)	70136-72-0
2,2'- (PFHxS-$NH(C_2H_5O)_2$)	70225-16-0
(1:1)(PFHxS-$N(C_2H_5)_3$)	72033-41-1
[(1,1-)] (PFHxS-$I(C_6H_4)_2(C_4H_9)_2$)	866621-50-3
(4-) (PFHxS-$S(C_6H_5)_2C_7H_7$)	910606-39-2
[4-[(2- -1- -2-)]] (PFHxS-$S(C_6H_5)_2C_{10}H_9O_2$)	911027-68-4
(1:1)(PFHxS-Cs)	92011-17-1
[k,n][1,4,7,13] ,19-[4-(1,1-)]-6,7,9,10,12,13- -, (PFHxS-$SC_{28}H_{31}O_4$)	928049-42-7
(PFHxS-Cl)	55591-23-6
PFHxS-	911027-69-5
	108427-53-8
(PFHxS-$P(C_4H_9)_4$))	2310194-12-6

EtFHxSAA	
N- -N-[( )] (EtFHxSAA)	68957-32-4
N- -N-[( )] (EtFHxSAA-K)	67584-53-6
N- -N-(( )) (EtFHxSAA-Na)	68555-70-4

(10) POPs

(11)

ILAC-G8:09/2019 *w*=0



SHA25-0093303-0001.C001

SGS

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