

Quantity	Value	Standard uncertainty ($k = 1$)	Unit	Distribution	Sensitivity coefficient	Contribution in pmol mol^{-1}	%
Weighing of SF ₆ permeation device							
m_{1,SF_6}	28.44957646	0.000000289	g	rectangular	790	2.30E-004	0
m_{2,SF_6}	28.43612094	0.000000289	g	rectangular	-790	-2.30E-004	0
t_{1,SF_6}	5999.45	0.025	min	normal	1.30E-003	3.30E-005	0
t_{2,SF_6}	14130.8	0.025	min	normal	-1.30E-003	-3.30E-005	0
$\text{Stab}_{\text{balance},\text{SF}_6}$	1	0.002	-	normal	11	0.021	46.3
$\text{Permeation}_{\text{SF}_6}$	1654.77	3.31	ng min^{-1}				
Stab_T	1	0.0005	-	normal	11	5.30E-003	2.9
$\text{Purity}_{\text{SF}_6}$	0.9995	0.000204	-	triangular	11	2.20E-003	0.5
Molar volume of carrier gas							
$\text{fraction}_{\text{O}_2}$	0.2	0.005	-	normal	-6.10E-003	-3.10E-005	0
d_{O_2}	1.4287	0.00015	kg m^{-3}	normal	-1.6	-2.50E-004	0
d_{N_2}	1.2501	0.00015	kg m^{-3}	normal	-6.6	-9.90E-004	0.1
M_{O}	15.9994	0.000151	g mol^{-1}	triangular	0.15	2.20E-005	0
M_{N}	14.006855	0.000174	g mol^{-1}	triangular	0.59	1.00E-004	0
$V_{m,\text{carrier}}$	28.8107	0.0199	L mol^{-1}				
Molar mass of SF ₆							
M_S	32.0675	0.00347	g mol^{-1}	triangular	-0.072	-2.50E-004	0
M_F	18.998403163	0.000000003	g mol^{-1}	normal	-0.43	-1.30E-009	0
M_{SF_6}	146.05792	0.00347	g mol^{-1}				
Dynamic dilution							
$qV_{\text{carrier},\text{SF}_6}$	4594.97	4.59	mL min^{-1}	normal	-2.30E-003	-0.011	11.6
qV_{3,SF_6}	10.809	0.0162	mL min^{-1}	normal	0.98	0.016	25.9
qV_{4,SF_6}	5115.46	5.12	mL min^{-1}	normal	-2.10E-003	-0.011	11.5
f_{SF_6}	2.11E-003	3.79E-006	-				
$x_{\text{res},\text{SF}_6}$	6.00E-003	2.45E-003	pmol mol^{-1}	triangular	1	2.40E-003	0.6
$x_{\text{filled},\text{SF}_6}$	116.438	0.34	pmol mol^{-1}				
Cryo-filling in cylinder MP-001							
$\Delta t_{\text{SF}_6,1}$	4018	0.9	s	normal	2.40E-003	2.20E-003	0.5
$\Delta t_{\text{HFC125},1}$	4018	0.9	s	normal	-2.40E-004	-2.20E-004	0
$\Delta t_{\text{HFC1234yf},1}$	4018	0.9	s	normal	-2.40E-004	-2.20E-004	0
$\Delta t_{\text{HCFC132b},1}$	4018	0.9	s	normal	-2.40E-004	-2.20E-004	0
$\Delta t_{\text{CFC13},1}$	4018	0.9	s	normal	-2.40E-004	-2.20E-004	0
$\Delta t_{\text{water},1}$	24 110	0.9	s	normal	-2.40E-004	-2.20E-004	0
$\Delta t_{\text{total},1}$	44 200	4.58	s				
$\text{Stab}_{\text{MFC5}}$	1	0.0005	-	normal	-0.96	-9.60E-004	0
$x_{\text{prep},\text{SF}_6,1}$	10.590	0.032	pmol mol^{-1}				