

Perfluorokerosene (PKF) Positive Ions and Perfluorotributyl Amine (PFTBA, FC43) Positive Ions

Reference Mass Table

Perfluorokerosene (PKF) Positive Ions

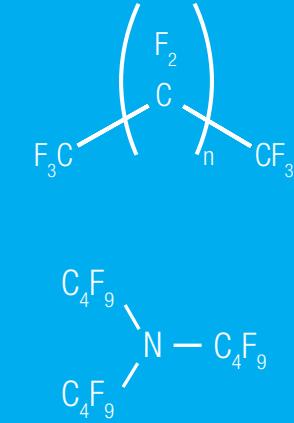
Formula	Exact Mass [u]	Rel. Intensity [%]
He^+	4.002055	1.00
CH_2^+	14.015101	0.50
H_2O^+	18.010016	10.00
N_2^+	28.005599	15.00
CF^+	30.997855	3.80
O_2^+	31.989281	3.00
Ar^+	39.961835	1.70
CHF_2^+	51.004083	6.70
CF_3^+	68.994661	100.00
C_2F_3^+	80.994661	0.50
C_3F_3^+	92.994661	3.30
C_2F_4^+	99.993064	5.60
C_3HF_4^+	113.000889	0.02
C_2F_5^+	118.991467	26.40
C_3F_5^+	130.991467	24.00
C_4F_5^+	142.991467	1.90
C_5F_5^+	154.991467	1.40
C_3F_7^+	168.988274	17.00
C_4F_7^+	180.988274	8.75
C_5F_7^+	192.988274	8.30
C_6F_7^+	204.988274	1.50
C_4F_9^+	218.985080	8.60
C_5F_9^+	230.985080	8.80
C_6F_9^+	242.985080	3.80
C_7F_9^+	254.985080	1.20
$\text{C}_5\text{F}_{11}^+$	268.981887	4.00
$\text{C}_6\text{F}_{11}^+$	280.981887	6.00
$\text{C}_7\text{F}_{11}^+$	292.981887	2.70
$\text{C}_8\text{F}_{11}^+$	304.981887	1.00
$\text{C}_6\text{F}_{13}^+$	318.978693	2.00
$\text{C}_7\text{F}_{13}^+$	330.978693	3.70
$\text{C}_8\text{F}_{13}^+$	342.978693	1.80
$\text{C}_9\text{F}_{13}^+$	354.978693	0.90
$\text{C}_7\text{F}_{15}^+$	368.975499	0.80
$\text{C}_8\text{F}_{15}^+$	380.975499	2.30
$\text{C}_9\text{F}_{15}^+$	392.975499	1.10
$\text{C}_{10}\text{F}_{15}^+$	404.975499	1.00
$\text{C}_{11}\text{F}_{15}^+$	416.975499	0.55
$\text{C}_9\text{F}_{17}^+$	430.972306	1.85
$\text{C}_{10}\text{F}_{17}^+$	442.972306	1.20
$\text{C}_{11}\text{F}_{17}^+$	454.972306	0.80
$\text{C}_{12}\text{F}_{17}^+$	466.972306	0.50

The calculated reference masses are based on the following values for isotopic masses: ${}^1\text{H}$ 1.0078250321u, ${}^4\text{He}$ 4.0026032497u, ${}^{12}\text{C}$ 12.0000000000u, ${}^{14}\text{N}$ 14.0030740052u, ${}^{16}\text{O}$ 15.9949146221u, ${}^{19}\text{F}$ 18.9984032000u, and ${}^{40}\text{Ar}$ 39.9623831230u. The mass of the electron (0.000548579911u) was taken into account for the calculation of the ionic masses. Reference: Nuclear Phys. A 1995, 595, 409–480; J. Phys. Chem. Ref. Data 1999, 28 (6), 1713–1852 and references cited therein.

Perfluorotributyl Amine (PFTBA, FC43) Positive Ions

Formula	Exact Mass [u]	Rel. Intensity [%]
He^+	4.002055	100.00
CH_2^+	14.015101	0.01
H_2O^+	18.010016	1.00
N_2^+	28.005599	1.00
CF^+	30.997855	0.19
O_2^+	31.989281	0.25
Ar^+	39.961835	0.10
CO_2^+	43.989281	1.00
CF_2^+	49.996258	3.00
CF_3^+	68.994661	50.68
C_2NF_2^+	75.999332	1.00
C_2F_3^+	80.994661	1.20
C_3F_3^+	92.994661	1.04
C_2F_4^+	99.993064	3.91
C_2NF_4^+	113.996138	3.52
C_2F_5^+	118.991467	5.85
C_3F_5^+	130.991467	49.77
C_3F_6^+	149.989871	2.11
C_3F_7^+	168.988274	5.14
C_4NF_6^+	175.992945	1.31
C_4F_7^+	180.988274	1.29
C_4F_8^+	199.986677	0.20
C_4NF_8^+	213.989751	2.46
C_4F_9^+	218.985080	100.00
C_5NF_8^+	225.989751	1.43

Formula	Exact Mass [u]	Rel. Intensity [%]
C_5F_9^+	230.985080	1.08
C_6F_9^+	242.985080	0.01
$\text{C}_5\text{NF}_{10}^+$	263.986557	37.57
$\text{C}_6\text{NF}_{10}^+$	275.986557	0.20
$\text{C}_6\text{F}_{11}^+$	280.981887	0.10
$\text{C}_6\text{NF}_{11}^+$	294.984961	0.20
$\text{C}_6\text{NF}_{12}^+$	313.983364	2.69
$\text{C}_7\text{NF}_{12}^+$	325.983364	0.25
$\text{C}_7\text{NF}_{13}^+$	344.981767	0.01
$\text{C}_6\text{NF}_{14}^+$	351.980170	1.69
$\text{C}_7\text{NF}_{14}^+$	363.980170	1.01
$\text{C}_8\text{NF}_{14}^+$	375.980170	1.22
$\text{C}_7\text{NF}_{16}^+$	401.976977	2.00
$\text{C}_8\text{NF}_{16}^+$	413.976977	10.77
$\text{C}_9\text{NF}_{16}^+$	425.976977	4.01
$\text{C}_8\text{NF}_{18}^+$	451.973783	0.60
$\text{C}_9\text{NF}_{18}^+$	463.973783	7.31
$\text{C}_{10}\text{NF}_{18}^+$	475.973783	0.01
$\text{C}_9\text{NF}_{20}^+$	501.970589	22.66
$\text{C}_{10}\text{NF}_{20}^+$	513.970589	0.08
$\text{C}_{11}\text{NF}_{20}^+$	525.970589	0.07
$\text{C}_{10}\text{NF}_{22}^+$	551.967396	0.02
$\text{C}_{11}\text{NF}_{22}^+$	563.967396	0.09
$\text{C}_{12}\text{NF}_{22}^+$	575.967396	1.25
$\text{C}_{13}\text{NF}_{24}^+$	613.964202	3.59



The calculated reference masses are based on the following values for isotopic masses:

${}^1\text{H}$ 1.0078250321u,

${}^{12}\text{C}$ 12.0000000000u,

${}^{13}\text{C}$ 13.0033548378u,

${}^{16}\text{O}$ 15.9949146221u,

${}^{35}\text{Cl}$ 34.9688527100u and

${}^{37}\text{Cl}$ 36.9659026000u,

${}^{79}\text{Br}$ 78.9183376u and

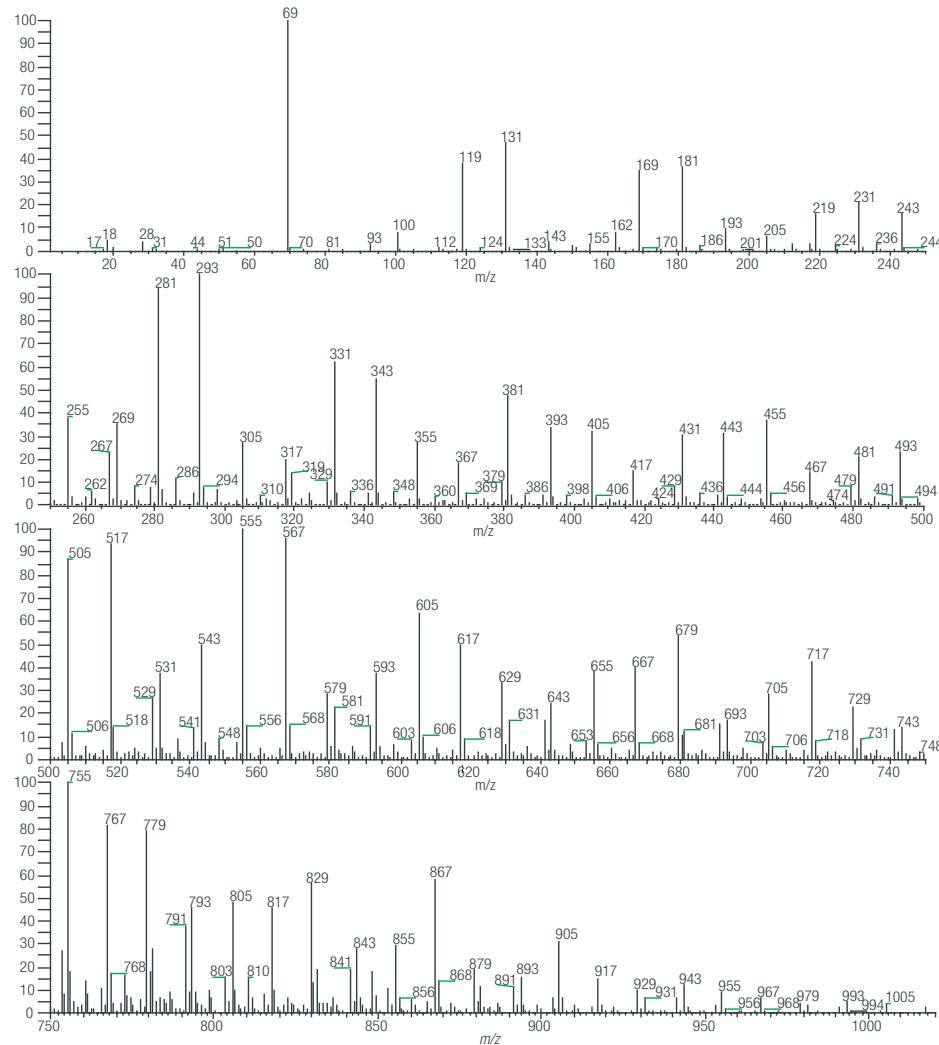
${}^{81}\text{Br}$ 80.9162910u.

All listed masses refer to singly positively charged ions. The mass of the electron (0.000548579911u) was taken into account for the calculation of the ionic masses. Reference: Nuclear Phys. A 1995, 595, 409–480; J. Phys. Chem. Ref. Data 1999, 28 (6), 1713–1852 and references cited therein.

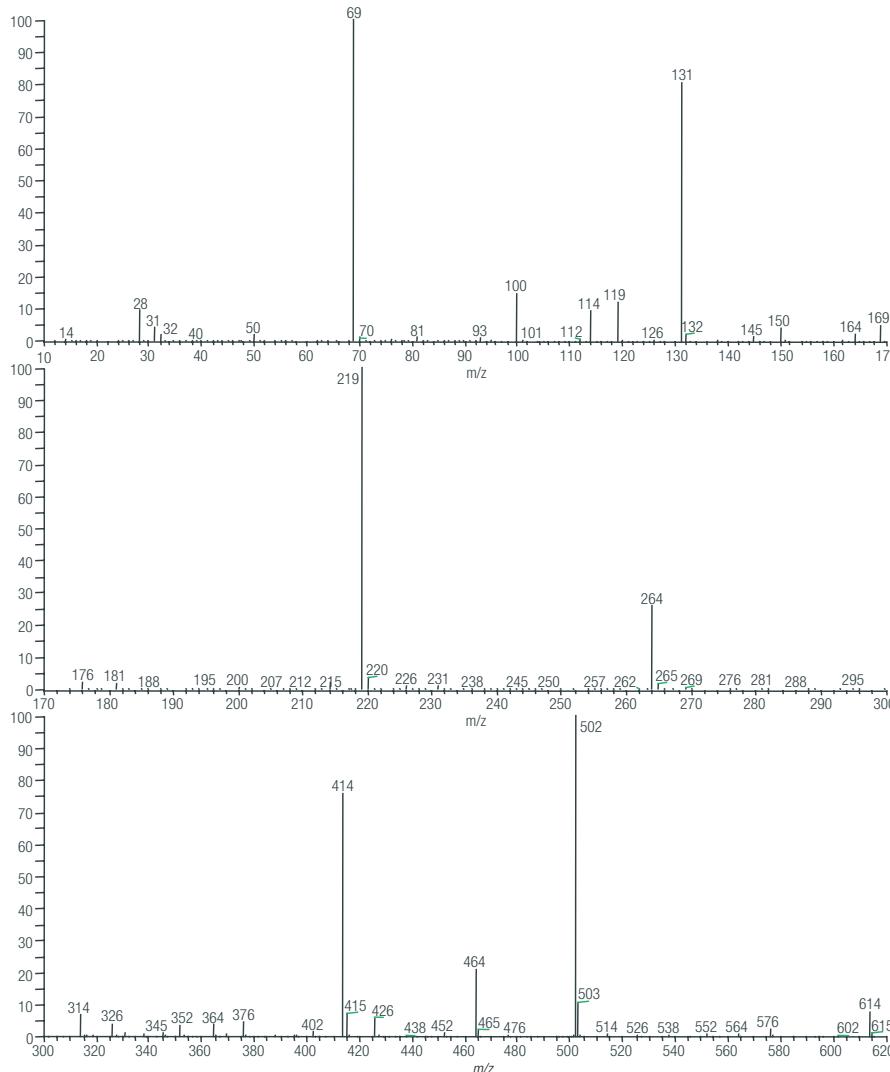
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