

# Panther Sensitivity Chart



Gas Type Name	Trade Name	Chemical Formula	Molecular Weight	Response Factor (He=1)	PPM	cc/sec	mg/m3	g/yr	Calc. (C) or Tested (T)	Gas Group 1-5	Conductivity at 400 K (mW/mK)	Conductivity vs air (mW/mK)
Air											33.3	0
GAS GROUP 1				1								
GAS GROUP 2				2.5								
GAS GROUP 3				4								
GAS GROUP 4				8								
GAS GROUP 5				16								
Helium		He	4.0	1.000	65	2.2E-06	11	0.011	T	1	190.6	157.3
Hydrogen		H2	2.0	0.648	42	1.4E-06	3	0.004	T	1	230.4	197.1
Sulfur hexa fluoride		SF6	146.1	1.448	94	3.1E-06	562	0.591	C	1	20.6	-12.1
Xenon		Xe	131.3	1.447	94	3.1E-06	505	0.531	T	1	7.3	-26
m-Xylene		C8H10	106.0	1.868	121	4.0E-06	526	0.553	C	1	17.71	-15.59
Perfluorocyclobutane	C318	C4F8	200.0	1.187	77	2.6E-06	631	0.664	C	1	19.5	-13.8
Toluene		C7H8	92.0	2.142	139	4.6E-06	524	0.551	C	2	19.3	-14
Ammonia		NH3	17.0	2.854	186	6.2E-06	129	0.136	C	2	37.4	4.1
Pentane		C5H12	72.2	2.861	186	6.2E-06	549	0.577	C	2	24.9	-8.4
Tetrafluoropropene	R1234yf	C3H2F4	114.0	2.483	161	5.4E-06	752	0.791	T	2		
Tetrafluoroethane	R134a	C2H2F4	102.0	2.880	187	6.2E-06	781	0.821	T	2	14.0	-19.3
Methane		CH4	16.0	4.007	260	8.7E-06	171	0.180	T	3	49.1	15.8
Isobutane	R600a	C4H10	58.1	3.847	250	8.3E-06	594	0.625	T	3	27.9	-5.4
Isopropanol		C3H8O	60.0	3.847	250	8.3E-06	614	0.645	C	3		
Butane		C4H10	58.1	4.556	296	9.9E-06	704	0.740	T	3	28.4	-4.9
Isobutylene		C4H8	55.1	3.576	232	7.7E-06	524	0.551	T	3		
Sulfur dioxide		SO2	64.1	3.428	223	7.4E-06	584	0.614	C	3	14.3	-19
Ethylene oxide		C2H4O	54.0	4.785	311	1.0E-05	687	0.722	C	3	25.0	-8.3
Argon		Ar	40.0	6.599	429	1.4E-05	701	0.737	T	4	22.6	-10.7
Carbon dioxide	R774	CO2	44.0	5.576	362	1.2E-05	652	0.686	T	4	25.1	-8.2
Propane		C3H8	44.1	6.115	397	1.3E-05	717	0.753	T	4	30.6	-2.7
Nitrogen		N2	28.0	9.182	597	2.0E-05	684	0.719	C	4	32.3	-1
Nitrous oxide		N2O	44.0	7.299	474	1.6E-05	854	0.898	T	4	26	-7.3
Acetylene		C2H2	26.0	6.907	449	1.5E-05	478	0.503	C	4	45.4	12.1
Ethylene		C2H4	28.1	9.329	606	2.0E-05	696	0.731	C	4	34.6	1.3
Carbon monoxide		CO	28.0	9.182	597	2.0E-05	684	0.719	C	4	32.3	-1
Methanol		CH4O	32.0	22.582	1468	4.9E-05	1923	2.022	C	5	26.2	-7.1
Oxygen		O2	32.0	22.582	1468	4.9E-05	1921	2.019	C	5	33.7	0.4
Nitric oxide		NO	32.0	13.241	861	2.9E-05	1056	1.110	C	5	33.1	-0.2