Explorer/Voyager/Sentry Assay List

PHOTOVAC
An INFICON Brand

Assay 1 Environmental	Assay 1 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine A Nitrogen 60c 8PSI	**PID / ECD**		
1,1-Dichloroethylene	0.025-100 / 0.250-200	C 299	9.81
1,2-Dichlorobenzene	0.03-50	A 1116	9.06
1,2-Dichloroethane	1-100 / 15-250	C 641	11.07
1,2-Dichloropropane	0.1-200	B 345	10.80
1,3-Dichlorobenzene	0.03-50	A 832	9.10
1,4-Dichlorobenzene	0.03-50	A 908	8.92
111-Trichloroethane	1.5-250 / 0.05-200	C 660	11.00
1122-Tetrachloroethane	0.3-300 / 0.022-200	A 800	11.10
112-Trichloroethane	0.1-200	B 1432	11.00
2-Chloroethyl Vinyl Ether	0.05-150	B 600	10.61
2-Hexanone	0.045-100	B 560	9.35
Acetone	0.015-100	C 237	9.70
Benzene	0.005-35	B 243	9.24
Bromodichloromethane	0.200-150 / 0.006-15	B 643	10.60
Bromoform	0.5-150 / 0.025-70	A 459	10.50
Bromomethane	0.025-100	C 186	10.54
c-1,2-Dichloroethylene	0.01-60	C 490	9.64
c-1,3-Dichloropropene	0.025-20 / 0.225-200	B 525	NA
Carbon Disulfide	0.05-125 / 0.350-200	C 350	10.08
Carbon Tetrachloride	No PID / 0.01-20	C 771	11.47
Chlorobenzene	0.01-25	B 889	9.07
Chloroethane	0.5-200	C 194	10.98
Chloroform	1-250 / 0.150-150	C 518	11.37
Chloromethane	0.75-200	C 136	11.26
Dibromochloromethane	0.075-200 / 0.006-15	B 1488	10.59
Ethylbenzene	0.01-100	B 650	8.76
Methyl Ethyl Ketone	0.015-100	C 447	9.52
Methyl Isobutyl Ketone	0.02-100	B 316	9.30
Methylene Chloride	0.05-200	C 300	11.33
m-Xylene	0.01-150	B 688	8.55
o-Xylene	0.01-150	B 875	8.56
p-Xylene	0.01-150	B 670	8.44
Styrene	0.045-60	A 370	8.46
t,12-Dichloroethylene	0.01-100	C 387	9.66
t-1,3-Dichloropropene	0.03-125 / 0.300-250	B 772	NA
Tetrachloroethylene	0.010-25 / 0.05-75	B 458	9.33
Toluene	0.01-100	B 440	8.83
Trichloroethylene	0.006-125 / 0.10-250	B 312	9.46
Vinyl Acetate	0.07-150	C 409	9.20
Vinyl Chloride	0.025-150	C 136	9.99

Assay 2 Petrochemical	Assay 2 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine B Air 60c 12 PSI			
Benzene	0.005-35	B 226	9.24
Ethanol	2-500	B 200	10.48
Ethylbenzene	0.01-100	B 650	8.76
MTBE	0.1-100	B 78	9.24
Methanol	10-500	B 159	10.84
m-Xylene	0.01-150	B 763	8.55
o-Xylene	0.01-150	B 998	8.56
p-Xylene	0.01-150		8.44
TAME	0.1-100	B 117	NA
Toluene	0.01-200	B 408	8.83

Assay 4 Rubber	Assay 4 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine B Nitrogen 60c 12PSI			
Acrylonitrile	1-180	B 155	10.91
1,3,Butadiene	0.1-10	C 242	9.07
Styrene	0.045-60	A 325	8.46

Assay 7 Latex Polymer	Assay 7 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine B Air 50c 12 PSI			
Vinyl Acetate	0.07-150	B 209	9.2
Methyl Acrylate	1-100	B 255	9.9
Ethyl Acrylate	0.5-50	B 370	10.3
Methyl Methacrylate	1-150	B 398	9.7
iso-Butyl Acrylate	1-100	A 229	NP
neo-Butyl Acrylate	1-100	A 332	NP
Ethylene	1-100	B 44	10.52
Styrene	0.045-60	A 341	8.46

Assay 5 Pulp Paper	Assay 5 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine B Air 60c 12 PSI			
A- Pinene	10-200	A 197	8.07
Acetone	0.015-100	B 109	9.7
Dimethyl Disulfide	0.05-15	B 450	7.4
Dimethyl Sulfide	0.05-10	B 89	8.69
Ethyl Mercaptan	0.05-10	B 84	9.31
Hydrogen Sulfide	0.1-35	C 43	10.45
Methanol	10-500	B 155	10.84
Methyl Ethyl Ketone	0.015-100	B 218	9.52
Methyl Mercaptan	0.05-10	B 70	9.44

Assay 10 Natural Gas	Assay 10 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine A N2 50c 6 PSI			
Ethane	2.0 - 25,000	C 162	11.52
Propane	0.500 - 25,000	C 211	10.94
Isobutane	0.500 - 15,000	C 280	10.68
Butane	0.500 - 10,000	C330	10.53
Isopentane	0.500 - 10,000	C 540	10.32
Pentane	0.500 - 10,000	C 650	10.34
Dimethyl Sulfide	0.050 - 100	C 730	8.69

Assay 6 Surfactants	Assay 6 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine B Air 45c 7.5 PSI			
Ethylene oxide	1-100	C 139	10.56
Propylene oxide	2-200	C 405	10.22

Assay 11 Agri Fumigants	Assay 10 Detection Limits in PPM	Retention Times Column and Seconds	Ionization Potential eV
Engine A N2 45c 6 PSI			
Phospine	1 - 100	C 102	9.87
Ethylene Oxide	1-100	C 85	10.56
Sulfuryl Fluoride	10 - 200 (ECD Only)	C 107	13.04
Methyl Bromide	0.025-100	C 150	10.54
Ethylene Dibromide	10 -100	A 300	10.35