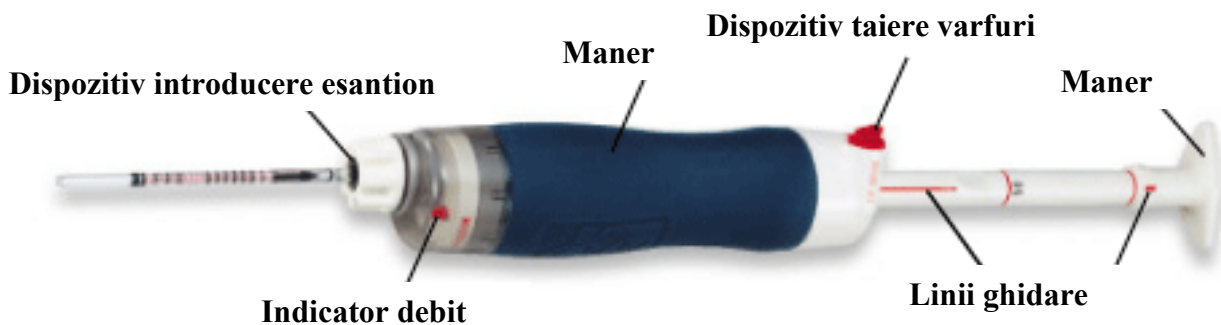


SISTEM DE DETECTIE GAZE COMPUS DIN POMPA DE PRELEVARE AP-20 SI TUBURI COLORIMETRICE

Principiu de functionare :



Sistemul de detectie prin tuburi colorimetrice consta dintr-o pompa de prelevare si tuburi colorimetrice din sticla. Tuburile sunt umplute cu un material absorbant si un reactiv chimic care, in prezenta gazului de masurat, produce o pata de culoare pe lungimea tubului. O scala de calibrare este imprimata pe tub astfel incat utilizatorul determina cu usurinta concentratia de gaz prezent in functie de lungimea petei de culoare.

Avantaje:

- ✓ Portabila si foarte simplu de utilizat;
- ✓ Nu necesita alimentare ;
- ✓ Nu necesita calibrare ;
- ✓ Analiza la costuri reduse ;
- ✓ Indicator de debit care arata terminarea prelevarii ;
- ✓ Dispozitiv de taiere varfuri, tuburi din sticla securizata pentru siguranta utilizatorului.

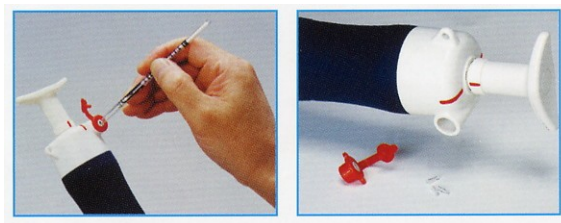
Metoda de utilizare :

1. Pregatiti pompa de prelevare

Verificati daca pompa prezinta scapari, conform instructiunilor incluse.

2. Taiati ambele capete ale tubului de prelevare

Introduceti varful tubului in dispozitivul de taiere varfuri si rotiti la 360°, apoi trageți-l catre Dvs. (varful din sticla poate fi aruncat prin inlaturarea dispozitivului de pe pompa).



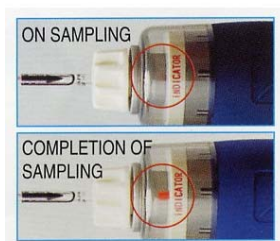
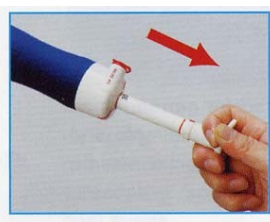
3. Conectati tubul la pompa de prelevare

Gazul de prelevare trebuie sa fie tras din tubul colorimetric in directia corecta. Introduceti tubul in conectorul din cauciuc cu sageata directionala de pe tub indreptata spre pompa.



4. Trageti manerul

Aliniati linia rosie din capatul pompei cu cea de pe axul manerului si trageti manerul pana in capatul pozitiei de blocaj de 100 ml pentru un 1 pompare. Daca esantionul cere o jumatate de pompare, trageti manerul pana la linia de 50ml, si axul va fi blocat la 50 ml.



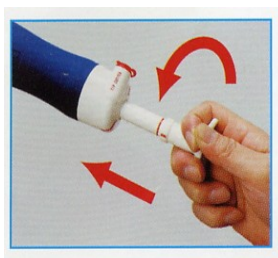
5. Trageti gazul de prelevare

Trageti gazul de prelevare pentru durata de timp specificata, si confirmati cu indicatorul de debit ca prelevarea este completa. Durata de prelevare ceruta de fiecare tub colorimetric este mentionata in fisa acestuia.

6. Deblocati manerul

Dupa terminarea prelevarii, rotiti manerul la un sfert de rotatie (90o) in orice directie pentru deblocarea manerului. Asigurati-va ca manerul ramane tras complet (daca manerul ramane tras partial, prelevarea este incompleta si va genera citirea unei valori scazute).

Unele tuburi colorimetrice solicita mai mult de 2 pompari. In acest caz, impingeti manerul inapoi si repetati operatiunea.

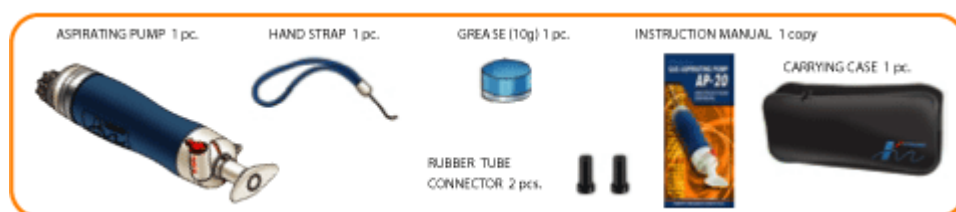


7. Cititi concentratia de gaz

Scoateti tubul colorimetric din pompa de prelevare dup ce ati tras volumul de esantion solicitat. Cititi concentratia de gaz din capatul maxim al petei referindu-va la scala imprimata pe tub. Unele tuburi cer o corectie de temperatura prin folosirea unui tabel de coeficienti de corectie pus la dispozitie in fisa tubului.

Accesorii incluse :

Kitul de prelevare AP-20 este compus din husa de transport, maner de transport, 2 conectori din cauciuc, 1 cutie (10g) lubrifiant si manual de utilizare AP-20 aspirating pump kit is composed of a carrying case, 2 pieces of the rubber tube connector, 1 piece of grease and an instruction manual.



Lista tuburilor colorimetrice (non-exhaustiva) :

Nota 1:

In situatia in care concentratia de gaz se citeste folosind un table de conversie, numarul tubului contine semnul (+)in aceasta brosură, de exemplu 190U(+). Totusi acest semn nu apare decat in aceasta brosură, nu si pe cutia sau in instructiunile tubului.

Nota 2:

Cand se produce o pata colorata constanta, care variaza in lungime in functie de concentratia substantei masurate, citirea se poate efectua direct de pe scala imprimata pe tub (metoda citirii directe), sau prin folosirea tabelului de concentratii din fiecare cutie (metoda tabelului de concentratii). Toate tuburile al caror numar contine literele "S" sau "U" au metoda citirii directe.

Gazul de masurat (Sinonim)	Formula chimica	Nr. Tub	Gama de masura (ppm)	Durata viata de raft (an)	Cantitatea de tuburi in cutie
Acetaldehyde -Concentration chart method	CH ₃ CHO	133A	0.004-1.0%	1	10
Acetaldehyde	CH ₃ CHO	133SB	5-140	2	10
Acetic acid	CH ₃ COOH	216S	1-50	3	10
Acetic anhydride	(CH ₃ CO) ₂ O	216S(+)	1-15	3	10
Acetone	CH ₃ COCH ₃	102SA	0.1-5.0%	3	10
		102SC	0.01-4.0%	1	10
		102SD	20-5,000	2	10
Acetylene	HC≡CH	101S	50-1,000	3	10
Acetylene/Ethylene - separation measurement	HC≡CH, H ₂ C=CH ₂	280S	C ₂ H ₂ :20-300 C ₂ H ₄ :200-2,000	1	2X5
Acrolein					
(Acryl aldehyde)	CH ₂ =CHCHO	136	0.005-1.8%	1	10
- Concentration chart method					

Acrylic acid	CH ₂ =CHCOOH	216S(+)	1-50	3	10
Acrylonitrile	CH ₂ =CHCN	128SA	0.1-3.5%	3	10
(Vinyl cyanide)		128SB	10-500	2	10
		128SC	1-120	1	2X5
		128SD	0.2-20	1	2X5
Allyl alcohol	CH ₂ =CHCH ₂ OH	184S(+)	20-500	2	10
Ammonia	NH ₃	105SA 105SB	0.5-10% 50-900	3 3	10 10
		105SC	5-260	3	10
		105SD	0.2-20	3	10
		105SH	0.5-30%	3	10
		105SM	0.1-1.0%	2	10
Aniline (Aminobenzene)	C ₆ H ₅ NH ₂	181S	1-30	3	10
Arsine	AsH ₃	140SA	5-160	2	10
		121U	0.05-2.0	2	10
Benzene - in presence of gasoline and/or other aromatic hydrocarbons	C ₆ H ₆	118SB 118SE	5-200 0.2-80	2 2	2X5 2X5
Benzene	C ₆ H ₆	118SC	1-100	2	10
		118SD	0.1-75	2	2X5
Bromine - Concentration chart method	Br ₂	114	1-20	2	10
1,3-Butadiene	CH ₂ =CHCH=CH ₂	168SA	0.03-2.6%	3	10
		168SB	30-600	3	10
		168SC	2.5-100	1	10
n-Butane	CH ₃ (CH ₂) ₂ CH ₃	221SA	0.05-0.6%	3	10
1-Butanol (n-Butyl alcohol)	CH ₃ (CH ₂) ₃ OH	190U(+)	5-100	2	10
2-Butanol (sec-Butyl alcohol)	CH ₃ CH ₂ CH(OH)CH ₃	189U	4-300	2	10
Butyl acetate	CH ₃ CO ₂ C ₄ H ₉	139SB(+)	0.01-1.0%	3	10
		138U	10-400	1	10
Butyl acrylate	CH ₂ =CHCO ₂ C ₄ H ₉	211U	5-60	2	10
Butyl amine	C ₄ H ₉ NH ₂	105SD(+)	1-20	3	10
Butyl cellosolve (Ethylene glycol monobutyl ether)	C ₄ H ₉ OCH ₂ CH ₂ OH	190U(+)	10-1,000	2	10
tert-Butyl mercaptan	(CH ₃) ₃ CSH	130U	0.5-10	2	10
Butyric acid	CH ₃ CH ₂ CH ₂ COOH	216S(+)	3-60	3	10
Carbon dioxide - Concentration chart method	CO ₂	126B	0.01-0.7%	2	10
Carbon dioxide	CO ₂	126SA 126SB	0.1-5.2% 0.05-1.0%	2 2	10 10
		126SF 126SG	100-4,000 0.02-1.4%	2 2	10 10
		126SH	1-20%	2	10
		126UH	5-50%	2	10
Carbon disulphide	CS ₂	141SA	30-500	2	2X5
		141SB	0.8-50	3	2X5
Carbon monoxide - Concentration chart method	CO	100	5-1,000	3	10
Carbon monoxide - in presence of Ethylene	CO		Measurement at 300-30 sec.	3	10
- Colour intensity method			for 10-1,000		
Carbon monoxide - in presence of Ethylene and NO ₂ - Colour intensity method	CO	106C	Measurement at 300-30 seconds for 10-1,000	2	10

Carbon monoxide	CO	106S 106SA 106SC	10-250 5- 2,000 1-50	3 3 1	10 10 10
		106SH	0.1%-2.0%	1	10
		106SS	30-500	1.5	10
		106UH	0.1-20%	3	10
Carbon tetrachloride (Tetrachloromethane)	CCl ₄	147S	0.5-60	1	2X5
Carbonyl sulphide	COS	239S	5-60	3	2X5
Chlorine	Cl ₂	109SA	1-40	2	10
		109SB	0.1-10.0	2	10
		109U	0.05-2	2	10
Chlorine dioxide -Concentration chart method	ClO ₂	116	1-20	2	10
Chlorobenzene	C ₆ H ₅ Cl	178SB	1-140	1	2X5
Chloroform (Trichloromethane)	CHCl ₃	152S	23-500	2	2X5
Chloropicrin (Nitrotrichloromethane)	Cl ₃ CNO ₂	172S	0.05-16.0	1	2X5
Chloroprene (2-Chlorobutadiene)	CH ₂ =CClCH=CH ₂	169S	0.5-20	3	2X5
Cresol	C ₆ H ₄ (CH ₃)(OH)	183U	0.5-25.0	2	10
Cyclohexane	C ₆ H ₁₂	115S	0.01-0.6%	3	10
Cyclohexanol	C ₆ H ₁₁ OH	206U	5-500	2	10
Cyclohexanone	C ₆ H ₁₀ O	197U	2-100	3	10
Cyclohexyl amine	C ₆ H ₁₁ NH ₂	105SD(+)	1-20	3	10
Diacetone alcohol					
(4-Hydroxy-4-methyl-2- pentanone)	(CH ₃) ₂ C(OH)CH ₂ COCH ₃	190U(+)	10-250	2	10
Diborane	B ₂ H ₆	242S	0.02-5.0	2	10
Dibutyl amine	(C ₄ H ₉) ₂ NH	105SD(+)	2-20	3	10
o-Dichlorobenzene	C ₆ H ₄ Cl ₂	214S	5-100	2	10
p-Dichlorobenzene	C ₆ H ₄ Cl ₂	215S	10-150	1	10
1,1-Dichloroethane (Ethylidene dichloride)	CH ₃ CHCl ₂	235S	10-160	1	2X5
1,2-Dichloroethane (Ethylidene dichloride)	ClCH ₂ CH ₂ Cl	230S	5-50	1	2X5
2,2-Dichloroethyl ether	(ClCH ₂ CH ₂) ₂ O	223S	2-30	1	2X5
1,2-Dichloroethylene (Acetylene dichloride)	ClCH=CHCl	145S	5-400	1	2X5
Dichloromethane (Methylene chloride)	CH ₂ Cl ₂	180S	10-1,000	2	2X5
1,3-Dichloropropane	ClCH ₂ CH ₂ CH ₂ Cl	194S	10-500	1	2X5
Diethyl amine	(C ₂ H ₅) ₂ NH	222S	1-20	3	10
Diethyl ether (Ethyl ether)	C ₂ H ₅ OC ₂ H ₅	107SA	0.04-1.4%	3	10
		107U	20-40	2	10
Diisopropyl amine	[(CH ₃) ₂ CH] ₂ NH	105SD(+)	1-16	3	10
N,N-Dimethyl acetamide	CH ₃ CON(CH ₃) ₂	229S	5-70	1	10
Dimethyl amine	(CH ₃) ₂ NH	227S	1-20	3	10
N,N-Dimethyl aniline	C ₆ H ₅ N(CH ₃) ₂	105SD(+)	0.5-9	3	10
N,N-Dimethyl formamide	HCON(CH ₃) ₂	196S	1-30	2	10
Dimethyl ether	CH ₃ OCH ₃	123S	0.01-1.2%	3	10
		139SB(+)	0.05-2.5%	3	10
1,4-Dioxane	C ₄ H ₈ O ₂	119U(+)	20-500	2	10
		105SD(+)	1-14	3	10
Dipropyl amine	[CH ₃ (CH ₂) ₂] ₂ NH	105SD(+)	1-14	3	10
Epichlorohydrine (1-Chloro,2,3- epoxy-propane)	OCH ₂ CHCH ₂ Cl	192S	5-50	1	2X5
Ethyl acetate	CH ₃ CO ₂ C ₂ H ₅	111SA	0.1-5.0%	3	10
		111U	10-1000	2	10
Ethyl acrylate	CH ₂ =CHCO ₂ C ₂ H ₅	211U(+)	5-60	2	10
Ethyl alcohol (Ethanol)	C ₂ H ₅ OH	104SA	0.05-5.0%	3	10
Ethyl amine	C ₂ H ₅ NH ₂	227S	1-20	3	10

Ethyl benzene	C ₆ H ₅ C ₂ H ₅	179S	10-500	1.5	10
Ethyl cellosolve (Ethylene glycol monoethyl ether) (2-Ethoxyethanol)	C ₂ H ₅ OCH ₂ CH ₂ OH	190U	5-500	2	10
Ethyl cellosolve acetate					
(Ethylene glycol ethyl ether acetate)	C ₂ H ₅ OC ₂ H ₄ OCOCH ₃	190U(+)	50-150	2	10
Ethylene -colour intensity	H ₂ C=CH ₂	108B	0.1-100	3	10
Ethylene -high range	H ₂ C=CH ₂	108SA	20-1,200	2	10
Ethylene dibromide (1,2-Dibromoethane)	BrCH ₂ CH ₂ Br	166S	1-50	1	2X5
Ethylene glycol	HOCH ₂ CH ₂ OH	232SA	20-250mg/m ₃	2	2X5
(Monoethylene glycol)		232SB	3-40mg/m ₃	2	2X5
Ethylene oxide	CH ₂ CH ₂ O	122SA 122SM 122SC 122SD	0.01-4% 5-100 1-15 0.1-14.0	3 3 2 1	10 10 2X5 2X5
Ethyl mercaptan	C ₂ H ₅ SH	165SA	1-160	2	10
(Ethanethiol)		165SB	2.5-80	2	10
		130U	0.5-10	2	10
Formaldehyde	HCHO	171SA	20-1,500	2	2X5
		171SB	1-35	3	2X5
		171SC	0.05-4.0	1	10
Formic acid	HCOOH	216S	1-50	3	10
Furan (Furfuran)	C ₄ H ₄ O	122SA(+)	0.01-2.0%	3	10
Furfural (2-Furaldehyde)	C ₅ H ₄ O ₂	190U(+)	2-60	2	10
Furfuryl alcohol	C ₄ H ₃ OCH ₂ OH	238S	2-25	1	10
Gasoline (Petrol)	C _n H _m	110S	0.05-0.6%	3	10
General hydrocarbons Mineral turpentine	HC	187S	50-1,400 as n-Hexane	2	10
Heptane	CH ₃ (CH ₂) ₅ CH ₃	113SB(+)	100-2,000	2	10
n-Hexane	CH ₃ (CH ₂) ₄ CH ₃	113SA	0.05-1.32%	3	10
		113SB	50-1,400	2	10
		113SC	5-800	2	10
Hydrazine (Amidrazone)	NH ₂ NH ₂	219S	0.05-10	1	10
Hydrogen	H ₂	137U	0.05-0.8%	3	5
Hydrogen chloride	HCl	173SA	20-1,200	2	2X5
		173SB	0.4-40	3	2X5
Hydrogen cyanide	HCN	112SA	0.01-3.0%	3	10
		112SB	0.5-100	2	10
		112SC	0.3-8	1	2X5
Hydrogen fluoride	HF	156S	0.17-30	3	10
Hydrogen peroxide	H ₂ O ₂	247S	0.5-10.0	3	10
Hydrogen selenide	H ₂ Se	167S	1-600	1	10
Hydrogen sulphide	H ₂ S	120SB 120SC	0.75-300 0.005-0.16%	3 3	10 10
		120SD	1-60	3	10
		120SE	0.5-40	2	10
		120SF	25-2000	3	10
		120SH	0.1-4.0%	3	10
		120SM	0.05-1.2%	2	10
		120U	0.2-6.0	2	10
		120UH	2-20%	3	10

		120UT	2.5-40%	3	10
Hydrogen sulphide and Mercaptans - separation measurement	H ₂ S & R.SH	282S	H ₂ S: 1-30 R.SH: 0.5-5	2	2X5
Isobutane	(CH ₃) ₃ CH	113SB(+)	50-1,200	2	10
Isobutyl acetate	CH ₃ CO ₂ CH ₂ CH(CH ₃) ₂	139SB(+)	0.01-1.4%	3	10
		153U	10-400	1	10
Isobutyl acrylate	CH ₂ =CHCO ₂ CH ₂ CH(CH ₃) ₂	211U(+)	5-60	2	10
Isobutyl alcohol (Isobutanol)	(CH ₃) ₂ CHCH ₂ OH	208U	5-100	2	10
Isobutylene	(CH ₃) ₂ C=CH ₂	113SB(+)	0.03-2.0%	2	10
Isobutyric acid	CH ₃ CH ₂ CH ₂ COOH	216S(+)	3-50	3	10
Isopentyl acetate (Isoamyl acetate)	CH ₃ CO ₂ (CH ₂) ₂ CH(CH ₃) ₂	188U	10-400	1	10
Isopentyl alcohol (Isoamyl alcohol)	(CH ₃) ₂ CH(CH ₂) ₂ OH	209U	5-100	2	10
Isoprene	CH ₂ =C(CH ₃)CH=CH ₂	190U(+)	1-16	2	10
Isopropyl acetate	CH ₃ CO ₂ CH(CH ₃) ₂	139SB(+)	0.01-1.2%	3	10
		111U	10-1,000	2	10
Isopropyl alcohol	CH ₃ CH(OH)CH ₃	122SA(+)	0.05-2.5%	3	10
(2-Propanol)		150U	20-1,200	2	10
Isopropyl mercaptan	(CH ₃) ₂ CHSH	130U	0.5-10	2	10
Isovaleric acid	(CH ₃) ₂ CHCH ₂ CO ₂ H	216S(+)	3-50	3	10
Maleic anhydride	C ₄ H ₂ O ₃	216S(+)	0.2-10	3	10
Mercury vapour	Hg	142S	0.1-10mg/m ³	3	10
Mesityl oxide (4-Methyl-3-penten-2-one)	CH ₃ COCH=C(CH ₃) ₂	190U(+)	5-100	2	10
Methacrylic acid	CH ₂ =C(CH ₃)COOH	216S(+)	1-50	3	10
Methyl acetate	CH ₃ CO ₂ CH ₃	111SA(+)	0.1-3.0%	3	10
Methyl acrylate	CH ₂ =CHCO ₂ CH ₃	211U	5-60	2	10
Methyl alcohol	CH ₃ OH	119SA	0.05-6.0%	3	10
(Methanol)		119U	20-1,000	2	10
Methyl amine	CH ₃ NH ₂	227S	1-20	3	10
n-Methyl aniline	C ₆ H ₅ NHCH ₃	105SD(+)	0.5-6.0	3	10
Methyl bromide	CH ₃ Br	157SA	10-500	3	2X5
(Bromomethane)		157SB	0.4-80	3	2X5
Methyl cellosolve (Ethylene glycol monomethyl ether) (2-Methoxyethanol)	CH ₃ OCH ₂ CH ₂ OH	190U	5-500	2	10
Methyl chloroform (1,1,1-Trichloroethane)	CH ₃ CCl ₃	160S	15-400	3	2X5
Methyl cyclohexane	C ₆ H ₁₁ CH ₃	113SB(+)	100-1,600	2	10
Methyl cyclohexanol	CH ₃ C ₆ H ₁₀ OH	199U	5-200	2	10
Methyl cyclohexanone	CH ₃ C ₆ H ₉ O	198U	2-100	2	10
Methyl ethyl ketone	CH ₃ COC ₂ H ₅	122SA(+)	0.05-5.0%	3	10
		139SB	0.01-1.4%	3	10
		139U	20-1,500	2	10
Methyl iodide (Iodomethane)	CH ₃ I	176S	2-40	2/3	2X5
Methyl isobutyl ketone	CH ₃ COCH ₂ CH(CH ₃) ₂	122SA(+)	0.01-0.6%	3	10
(Isopropyl acetone)		155U	5-300	2	10
Methyl mercaptan	CH ₃ SH	130U	0.5-10	2	10
(Methanethiol)		164SA	5-140	2	10
		164SH	50-1,000	3	10
Methyl methacrylate	CH ₂ =C(CH ₃)CO ₂ CH ₃	184S	10-160	2	10
Methyl styrene	CH ₃ C ₆ H ₄ CH=CH ₂	193S	10-500	3	10
Monoethanol amine (2-Aminoethanol)	H ₂ NCH ₂ CH ₂ OH	224SA	0.5-50	2	10
Morpholine	C ₄ H ₉ NO	105SD(+)	2-22	3	10

Naphthalene	C ₁₀ H ₈	153U(+)	10-100	1	10
Nickel carbonyl (Nickel tetracarbonyl) -Concentration chart method	Ni(CO) ₄	129	20-700	1/2	10
Nitric acid vapour	HNO ₃	233S	1-20	1	10
Nitrogen dioxide	NO ₂	117SA	20-1,000	3	10
		117SB	0.5-30.0	1	10
		117SD	0.1-1.0	1.5	2X5
Nitrogen oxide and dioxide - separation measurement - Concentration chart method	NO & NO ₂	174A 174B	NO: 10-300 NO ₂ : 1-40	2 2	5 2X5
Nitrogen oxides	NO+NO ₂	175SA	20-250	1	10
		175U	0.5-30	3	10
		175SH	100-2,500	2	10
Organic gas checker	C _n H _m	186	-	2	10
Oxygen	O ₂	159SA	2-24%	2	5
		159SB	2-24%	2	5
Oxygen - Non-heating type	O ₂	159SC	1.5-24%	2	2X5
Oxygen/Carbon dioxide - separation measurement	O ₂ & CO ₂	281S	O ₂ : 2-10% CO ₂ : 1-20%	1.5	2X5
Ozone	O ₃	182SA	50-1,000	2	10
		182SB	2.5-100	2	10
		182U	0.025-3.0	2	10
Pentane	CH ₃ (CH ₂) ₃ CH ₃	113SB(+)	50-1,000	2	10
Pentyl acetate (Amyl acetate)	CH ₃ CO ₂ (CH ₂) ₄ CH ₃	210U	10-200	2	10
Pentyl amine	CH ₃ (CH ₂) ₃ CH ₂ NH ₂	105SD(+)	2-22	3	10
Phenol	C ₆ H ₅ OH	183U	0.5-25.0	2	10
Phosgene (Carbonyl chloride)	COCl ₂	146S	0.1-20	1	10
Phosphine in Acetylene	PH ₃	121SA	20-800	3	10
- Use with an orifice.		121SB	5-90	3	10
Phosphine	PH ₃	121SC 121SD 121SH 121U	20-1,400 0.25-20.0 100-3,200 0.05-2.0	3 1 3 2	10 10 10 10
Propane	C ₃ H ₈	125SA	0.02-0.5%	2	10
Propionic acid	CH ₃ CH ₂ COOH	216S(+)	3-50	3	10
Propyl acetate	CH ₃ CO ₂ (CH ₂) ₂ CH ₃	139SB(+)	0.01-1.4%	3	10
		151U	20-1000	2	10
Propyl amine	CH ₃ CH ₂ CH ₂ NH ₂	105SD(+)	1-20	3	10
Propylene	CH ₂ =CHCH ₃	185S	50-1,000	2	10
Propylene oxide (1,2-Epoxypropane)	CH ₃ CHCH ₂ O	163SA	0.05-5.0%	3	10
n-Propyl mercaptan	CH ₃ CH ₂ CH ₂ SH	130U	0.5-10	2	10
Pyridine	C ₅ H ₅ N	105SD(+)	0.5-10	3	10
Silane	SiH ₄	240S	0.5-50	1	10
Styrene	C ₆ H ₅ CH=CH ₂	158S	2.5-300	3	10
(Vinyl benzene)		158SB	1-100	3	2X5
Sulphur dioxide	SO ₂	103SA 103SB 103SC 103SD 103SE	0.1-3.0% 0.02-0.3% 20-300 1-60 0.25-10	3 3 2 3 1	10 10 10 10 10
Sulphur dioxide - in flue gas	SO ₂	103SF	0.02-0.3%	3	2X5
Sulphuric acid	H ₂ SO ₄	244U	0.5-5mg/m ₃	2	10

Tetrachloroethylene (Perchloroethylene)	$\text{Cl}_2\text{C}=\text{CCl}_2$	135SA	5-300	2	10
		135SB	0.2-10	1	10
		135SH	0.05-2.0%	2	2X5
Tetraethoxysilane	$\text{Si}(\text{OC}_2\text{H}_5)_4$	243U	5-200	3	10
Tetrahydrofuran	$(\text{CH}_2)_4\text{O}$	102SA(+)	0.2-5.0%	3	10
		162U	20-400	2	10
Toluene (Methyl benzene)	$\text{C}_6\text{H}_5\text{CH}_3$	124SA	10-500	3	10
		124SB	2-100	3	10
		124SH	100-3,000	2	10
o-Toluidine	$\text{C}_6\text{H}_4(\text{CH}_3)(\text{NH}_2)$	105SD(+)	2-22	3	10
p-Toluidine	$\text{C}_6\text{H}_4(\text{CH}_3)(\text{NH}_2)$	105SD(+)	2-20	3	10
1,1,2-Trichloroethane	$\text{Cl}_2\text{CHCH}_2\text{Cl}$	236S	10-100	1	2X5
Trichloroethylene	$\text{Cl}_2\text{C}=\text{CHCl}$	134SA	5-300	2	10
		134SB	0.2-36.8	1	10
		134SH	0.05-2.0%	2	10
Triethyl amine	$(\text{C}_2\text{H}_5)_3\text{N}$	213S	1-20	3	10
Trimethyl amine	$(\text{CH}_3)_3\text{N}$	222S	1-20	3	10
1,2,4-Trimethyl benzene	$\text{C}_6\text{H}_3(\text{CH}_3)_3$	111U(+)	20-250	2	10
2,2,4-Trimethyl pentane	$(\text{CH}_3)_3\text{CCH}_2\text{CH}(\text{CH}_3)_2$	113SB(+)	100-4,000	2	10
n-Valeric acid	$\text{CH}_3(\text{CH}_2)_3\text{CO}_2\text{H}$	216S(+)	3-70	3	10
Vinyl acetate	$\text{CH}_3\text{CO}_2\text{CH}=\text{CH}_2$	237S	5-120	2	10
Vinyl chloride (Chloroethylene)	$\text{CH}_2=\text{CHCl}$	132SA	0.05-1.0%	3	10
		132SB	5-500	1.5	2X5
		132SC	0.1-12.0	3	2X5
Water vapour	H_2O	177SA 177U	1.7-33.8mg/l	3 3 3 3	10 10 10
		177UL	0.05-2.0mg/l		10
		177UR	3-80LB/MMCF 2-12LB/MMCF		
Xylene (Dimethyl benzene)	$\text{C}_6\text{H}_4(\text{CH}_3)_2$	143SA	5-1,000	1.5	10
		143SB	5-200	2	10

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