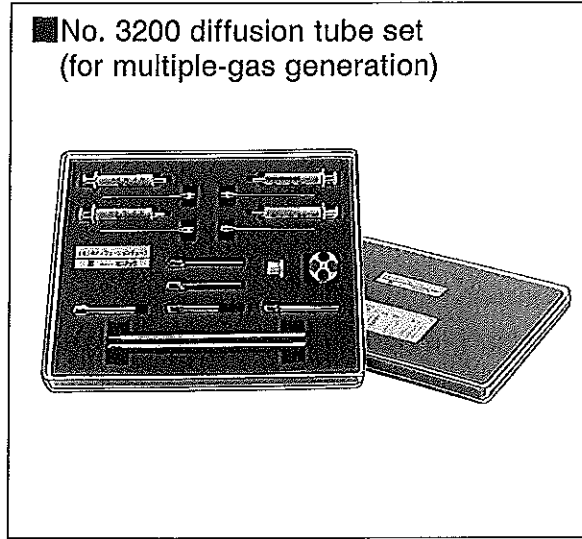
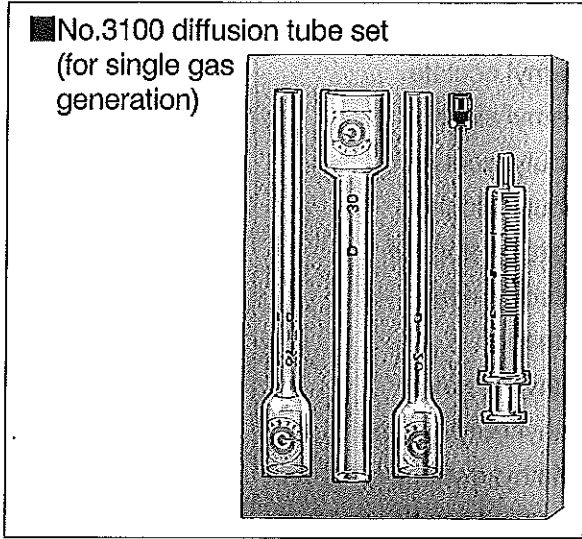


■ Calibration gas examples that can be generated by using a single permeation tube (with 200 to 10,000ml/min dilution)

Calibration Gas	Catalogue No.	Adjustment Range (ppm)	Calibration Gas	Catalogue No.	Adjustment Range (ppm)
Acetaldehyde	P-92-1	0.1 ~ 5.2	Hydrogen Sulphide	P-4	0.1 ~ 13.6
Ammonia	P-3	0.2 ~ 17.9	Methyl Bromide	P-136-H	0.5 ~ 23
Ammonia	P-3-M	0.3 ~ 40.8	Methylamine	P-182-H	0.5 ~ 25.6
Bromine	P-10-H	0.05 ~ 2.5	Methyl Chloride	P-132-H	1.6 ~ 77
1,3-Butadiene	P-174-H	0.7 ~ 31	Methyl Mercaptan	P-71-5	0.007 ~ 1.52
Chlorine	P-8-1	0.03 ~ 3.29	Methyl Mercaptan	P-71-H	0.16 ~ 11.4
Chlorine	P-8-5	0.15 ~ 16.4	Nitrogen Dioxide	P-9-1	0.05 ~ 3.99
Chlorine	P-8-M	0.5 ~ 53.1	Nitrogen Dioxide	P-9-H	1.8 ~ 133
Dichloromethane	P-138-H	0.3 ~ 15.8	Propane	P-100	0.03 ~ 1.9
Dimethylamine	P-181-H	0.2 ~ 10.3	Propylene Oxide	P-164-H	0.7 ~ 33
Dimethyl Disulphide	P-73-H	0.003 ~ 0.45	Styrene	P-124-H	0.0045~0.22
Dimethyl Sulphide	P-74-H	0.04 ~ 6.3	Sulphur Dioxide	P-5-5	0.04 ~ 3.6
Ethyl Mercaptan	P-72-H	0.04 ~ 1.87	Sulphur Dioxide	P-5	0.1 ~ 7.2
Ethylene Oxide	P-163-H	0.5 ~ 23.0	Sulphur Dioxide	P-5-H	1.1 ~ 76.4
Formaldehyde	P-91-H-5	0.0049 ~ 0.24	Toluene	P-122-H	0.032 ~ 1.6
Freon 11	P-51-H	0.4 ~ 16.4	Trimethylamine	P-180-H	0.06 ~ 3.1
Hydrogen Fluoride	P-17	0.11 ~ 11.3	Vinyliden Chloride	P-130-H	0.3 ~ 13.8
Hydrogen Fluoride	P-17-5	0.3 ~ 29	Vinyl Chloride	P-131	0.05 ~ 3.7
Hydrogen Fluoride	P-17-H	0.6 ~ 58	Vinyl Chloride	P-131-H	0.8 ~ 58

Note: When multiple (n) tubes are used, concentrations n times higher than the above table will be obtained.



■ Diffusion tubes

Tube No.	Type	Inner diameter	Length
3100	D-10	3.5 mm (0.14 in)	} 100 mm (3.93 in)
	D-20	6.0 mm (0.23 in)	
	D-30	10.0 mm (0.39 in)	
3200	D-01	1.6 mm (0.06 in)	} 50 mm (1.95 in)
	D-02	2.6 mm (0.10 in)	
	D-03	3.8 mm (0.15 in)	} 40 mm (1.56 in)
	D-04	5.0 mm (0.19 in)	
	D-05	6.0 mm (0.23 in)	

**■ Calibration gas examples that can be generated by using a single No.3100 or No.3200 diffusion tube (with 200 to 8,000ml/min dilution at 30 to 50°C (86 to 122 °F))**

Calibration gas	Concentrations	Calibration gas	Concentrations
Acetic acid	0.1 to 290 ppm	Isoamyl acetate	0.25 to 32 ppm
Acetone	1.5 to 5270 ppm	Isoamyl alcohol	0.08 to 26 ppm
Acrylonitrile	1.1 to 900 ppm	Isobutyl acetate	0.13 to 52 ppm
Amyl acetate	0.2 to 29 ppm	Isobutyl alcohol	0.1 to 200 ppm
Aniline	0.1 to 10 ppm	Isopropyl acetate	0.47 to 330 ppm
Benzene	0.5 to 1200 ppm	Isopropyl ether	0.6 to 1700 ppm
Benzotrichloride	0.02 to 0.6 ppm	Methanol	1.1 to 3600 ppm
Butyl acetate	0.09 to 61 ppm	Methyl acetate	1.3 to 4400 ppm
n-Butyl alcohol	0.1 to 118 ppm	Methyl butyl ketone	0.2 to 70 ppm
sec-Butyl alcohol	0.1 to 300 ppm	1-Methyl cyclohexanol	0.07 to 9.6 ppm
tert-Butyl alcohol	0.2 to 690 ppm	3-Methyl cyclohexanone	0.1 to 14.3 ppm
Carbon disulphide	2.5 to 5200 ppm	Methyl ethyl ketone	0.4 to 1100 ppm
Carbon tetrachloride	0.5 to 1300 ppm	Methyl isobutyl ketone	0.15 to 114 ppm
Chlorobenzene	0.1 to 133 ppm	Octane	0.1 to 120 ppm
Chloroform	1.0 to 2900 ppm	Pentane	4.3 to 4000 ppm
Cyclohexane	0.8 to 550 ppm	1-Pentanol	0.1 to 38 ppm
Cyclohexanol	0.04 to 2.7 ppm	1-Propanol	0.1 to 378 ppm
Cyclohexanone	0.03 to 14 ppm	2-Propanol	0.2 to 820 ppm
o-Dichlorobenzene	0.01 to 4.9 ppm	Propionic acid	0.1 to 64 ppm
1,1-Dichloroethane	1.3 to 4200 ppm	Propyl acetate	0.25 to 190 ppm
1,2-Dichloroethane	0.4 to 1000 ppm	Propyl bromide	0.7 to 1800 ppm
1,2-Dichloroethylene	4.0 to 1700 ppm	Propyl iodide	0.2 to 500 ppm
Dichloromethane	2.9 to 4200 ppm	Styrene	0.05 to 21 ppm
N,N-Dimethylformamide	0.1 to 69 ppm	1,1,2,2-Tetrachloroethane	0.1 to 57 ppm
1,4-Dioxane	0.2 to 490 ppm	Tetrachloroethylene	0.1 to 96 ppm
Ethanol	0.4 to 1200 ppm	Tetrahydrofuran	1.6 to 1100 ppm
Ethyl acetate	0.5 to 1200 ppm	Toluene	0.1 to 330 ppm
Ethyl benzene	0.1 to 109 ppm	1,1,1-Trichloroethane	0.5 to 1400 ppm
Ethyl bromide	4.0 to 3800 ppm	1,1,2-Trichloroethane	0.1 to 270 ppm
Ethyl cellosolve	0.1 to 35 ppm	Trichloroethylene	0.5 to 410 ppm
Ethyl ether	5.3 to 4900 ppm	m-Xylene	0.1 to 88 ppm
Formic acid	0.3 to 870 ppm	o-Xylene	0.1 to 76 ppm
Heptane	0.3 to 220 ppm	p-Xylene	0.1 to 89 ppm
1-Heptanol	0.1 to 34 ppm		
Hexane	0.6 to 1600 ppm		
1-Hexanol	0.1 to 13 ppm		