TABLE 11.21

RETENTION VOLUMES RELATIVE TO DIPHENYL ON APIEZON M GREASE AT 197°C OF SUBSTITUTED DIPHENYLS[a]

Substance	Relative retention
Diphenyl	*1.000*
2-Methyl diphenyl	0.96
3-Methyl diphenyl	1.55
4-Methyl diphenyl	1.65
2,2'-Dimethyl diphenyl	1.005
3,3'-Dimethyl diphenyl	2.40
4,4'-Dimethyl diphenyl	2.69
2,3'-Dimethyl diphenyl	1.43
2,4'-Dimethyl diphenyl	1.55
3,4'-Dimethyl diphenyl	2.54
2,3'-Dimethyl diphenyl	1.67
2,4-Dimethyl diphenyl	1.55
2,5-Dimethyl diphenyl	1.49
2,6-Dimethyl diphenyl	1.09
3,4-Dimethyl diphenyl	2.86
3,5-Dimethyl diphenyl	2.36
2-Ethyl diphenyl	1.22
3-Ethyl diphenyl	2.19
4-Ethyl diphenyl	2.45
2,6,2'-Trimethyl diphenyl	1.17
2-*n*-Propyl diphenyl	1.56
2-*i*-Propyl diphenyl	1.30
2,4,2',4'-Tetramethyl diphenyl	2.50
3,4,3',4'-Tetramethyl diphenyl	8.10
2,6,2',6'-Tetramethyl diphenyl	1.33
2,2'-Diethyl diphenyl	1.72
3,3'-Diethyl diphenyl	*4.55*
4,4'-Diethyl diphenyl	5.95
2-*i*-Propyl-5-methyl diphenyl	1.91
2-*n*-Butyl diphenyl	2.24
2,4,6,2',4',6'-Hexamethyl diphenyl	2.90
2,2'-Di-isopropyl diphenyl	2.20
2,2'-Di-tert-butyl diphenyl	5.05

[a] See references *19* and *20*.

(Section 7.1) are up to about 50% different. This may be illustrated for argon detectors by the points for aromatic compounds on Fig. 8.12, which are very far astray from the others. For catharometers, the relative weight sensitivities of a number of compounds [calculated from Rosie and Grob (*22*)] is presented in Table 11.22(a), illustrating the difference produced

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