

Paper Chromatography of the Salts of Organic Bases. II*

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The authors compared the paper chromatograms of hydriodides of organic bases obtained by developing with butanol with those of the quarternary ammonium iodides. On the latter could be observed either a spot of iodine which

coincided with the spot of the base colored by Dragendorff's reagent, or two spots of iodine, one of which coincided with that of the base; while the spot of iodine of the former did not coincide at all.

Experimental

The paper used was Toyo-Filter paper No. 131 in 2×40 cm. strips. Wet butanol, the developing solvent, was allowed to descend for 12—14 hours at

20° . The spots of iodine were developed by spraying with H_2O_2 which causes iodine-starch reaction.

Rf. of hydriodides.

Hydriodides of.	Rf calcted from the spot of I.	Rf calcted from the spot of the base.
<i>d,l</i> -Methylephedrine	0.06	0.78
Aniline	0.06	0.88
Dimethylaniline	0.06	0.90
<i>p</i> -Toluidine	0.06	0.93
Pyridine	0.06	0.74
Quinoline	0.06	0.90
Isoquinoline	0.06	0.92
2-Methylbenzothiazole	0.06	0.73
Desoxynupharidine	0.06	0.92
Dihydrodesoxynupharidine	0.06	0.92

Rf. of quarternary ammonium iodides. (I)

Quarternary ammonium iodides.	Rf calcted from the spot of I.		Rf calcted from the spot of the base.
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Δ -Dimethylbenzylamine methiodide	0.06	0.48	0.48
<i>d,l</i> -Methylephedrine methiodide	0.06	0.51	0.51
Dimethylaniline methiodide	0.06	0.30	0.30
Diethylaniline ethiodide	0.06	0.77	0.77
4-Methylpyridine methiodide	0.06	0.50	0.50
3-Hydroxypyridine methiodide	0.06	0.32	0.32
Quinoline methiodide	0.06	0.21	0.21

3-Bromoquinoline methiodide	0.06	0.19	0.19
Quinaldine methiodide	0.06	0.18	0.18
Quinaldine ethiodide	0.06	0.31	0.31
Lepidine ethiodide	0.06	0.41	0.41
2-Iodolepidine methiodide	0.06	0.20	0.20
6-Methylquinoline methiodide	0.06	0.26	0.26
8-Methylquinoline methiodide	0.06	0.23	0.23
Isoquinoline methiodide	0.06	0.23	0.23
2-Methylbenzimidazole methiodide	0.06	0.27	0.27
3-Methylthiazole methiodide	0.06	0.26	0.26
1,3-Dimethylthiazole ethiodide	0.06	0.30	0.30
Benzothiazole methiodide	0.06	0.19	0.19
2-Methylbenzole methiodide	0.06	0.24	0.24
2-Methylnaphthothiazole methiodide	0.06	0.27	0.27
2,4-Dimethylbenzothiazole methiodide	0.06	0.26	0.26
2-Methyl-6-methoxypyridothiazole methiodide	0.06	0.17	0.17
2-Methyl-6-ethoxypyridothiazole methiodide	0.06	0.23	0.23
<i>N</i> -Methyl- α -conine methiodide	0.06	0.55	0.55
Desoxynupharidine methiodide	0.06	0.60	0.60
Λ -Methyltetrahydrodesoxynupharidine methiodide	0.06	0.60	0.60

Rf. of quarternary ammonium iodides. (II)

Quarternary ammonium iodides.	Rf calcted from the spot of 1.	Rf calcted from the spot of the base.
Pyridine methiodide	0.14	0.14
Picoline methiodide	0.16	0.16
<i>N</i> -Methylpyrazole methiodide	0.16	0.16
Thiazole methiodide	0.16	0.16
2-Methyl-6-chloropyridothiazole methiodide	0.17	0.17

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