

1940

Dyes Containing Long-Chained Aliphatic Radicals

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Recommended Citation

Hoyt, Fred W. and Gilman, H. (1940) "Dyes Containing Long-Chained Aliphatic Radicals," *Proceedings of the Iowa Academy of Science*, 47(1), 262-262.

Available at: <https://scholarworks.uni.edu/pias/vol47/iss1/50>

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DYES CONTAINING LONG-CHAINED ALIPHATIC RADICALS

FRED W. HOYT AND H. GILMAN

The investigation of the synthesis and properties of compounds containing long-chained aliphatic radicals has been extended to the preparation of several azo dyes, coupling products of β -naphthol with the appropriately substituted aromatic diazonium chlorides. The dyes prepared include those from a series of three *p*-alkoxyanilines, $\text{ROC}_6\text{H}_4\text{NH}_2$, where R is *n*- $\text{C}_{12}\text{H}_{25}$ —, *n*- $\text{C}_{14}\text{H}_{29}$ —, and *n*- $\text{C}_{16}\text{H}_{33}$ —, all deep red in color; and two brighter red compounds from *p*-(N-alkylsulfonamido)-anilines, $\text{H}_2\text{NC}_6\text{H}_4\text{SO}_2\text{NHR}$, where R is *n*- $\text{C}_{12}\text{H}_{25}$ — and *n*- $\text{C}_{18}\text{H}_{37}$ —.

These compounds are crystalline solids, soluble in the usual organic solvents and in fats and oils. The melting points of the compounds are such that they might serve as derivatives for the corresponding anilines.

The compounds prepared and their melting points are: 1-(*p*-dodecoxyphenylazo)-2-naphthol, m. 80-82°; 1-(*p*-tetradecoxyphenylazo)-2-naphthol, m. 81.5-83°; 1-(*p*-hexadecoxyphenylazo)-2-naphthol, m. 82-84°; 1-[*p*-(N-dodecylsulfonamido)-phenylazo]-2-naphthol, m. 163-164°; and 1-[*p*-(N-octadecylsulfonamido)-phenylazo]-2-naphthol, m. 158-159.5°.

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NEW SYNTHETIC TOOLS IN THE PYRIDINE, QUINOLINE AND OTHER NITROGEN- HETEROCYCLIC SERIES

SYDNEY M. SPATZ AND H. GILMAN

The halogen-metal interconversion reaction now makes possible the preparation of hitherto difficultly or completely inaccessible organolithium compounds from the corresponding bromo- or iodo-nuclear substituted nitrogen heterocycles by means of other organolithium compounds like *n*-propyllithium and *n*-butyllithium:

