

HADIAH

Reason's last step is the recognition that
an infinite number of things are going on
beyond it. It is merely feeble if it does
not go as far as to realize that.

-Blaise Pascal, Pensée 188

PENENTUAN HASIL TINDAKBALAS ANTARA ASID KROMOTROPIK
DAN FORMALDEHID

oleh

KHOO KONG SOO

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ABSTRAK

Identiti hasil tindakbalas antara asid kromotropik dan formaldehid berlebihan tanpa asid sulfurik pekat dibuktikan sebagai dimer di mana dua molekul asid kromotropik diikat melalui dua titian olefinik, berasaskan kepada spektrum N.M.R. Proton, mikroanalisis untuk C, H, N dan S, dan pentitratan Karl Fischer.

Struktur hasil tindakbalas antara formaldehid dan asid kromotropik berlebihan dalam asid sulfurik pekat dibuktikan sebagai dimer di mana dua molekul asid kromotropik diikat melalui satu titian olefinik, berasaskan kepada spektrum N.M.R. Proton dan juga dengan perbandingan antara spektrum penyerapan ultra-lembayungnya dengan spektrum untuk hasil tindakbalas yang pertama.

ABSTRACT

The identity of the reaction product of chromotropic acid and excess formaldehyde in the absence of concentrated sulfuric acid is shown to be a dimer in which two molecules of chromotropic acid are linked by two methine bridges on the basis of evidence from its Proton N.M.R. spectrum, microanalysis for C, H, N, and S and Karl Fischer titration.

The structure of the reaction product of formaldehyde and excess chromotropic acid in the presence of concentrated sulfuric acid is deduced to be a dimer in which two molecules of chromotropic acid are linked by one methine bridge on the basis of its Proton N.M.R. spectrum, and by comparison of its u.v. absorption spectra with that of the reaction product mentioned earlier.