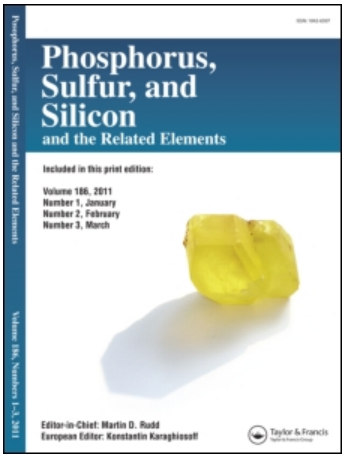


Phosphorus, Sulfur, and Silicon and the Related Elements
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713618290

Stable Quinome Methides: Regioselective Para-Oxidation of a 2,4-Bisalkylthiomethenol and Addition Reaction Reaction to Quinonemethides

Hansurudolf Meier[a]; Hanspeter Kuenzi[a]; Hermann Fuhrer[b]; Günher Rist[b]
[a] Research Laboratories, Additives Division, CIBA Corporation, Marly 1 [b] Physics Department, CIBA Corporation, Basel

To cite this Article Meier, Hansurudolf , Kuenzi, Hanspeter , Fuhrer, Hermann and Rist, Günher(1994) 'Stable Quinome Methides: Regioselective Para-Oxidation of a 2,4-Bisalkylthiomethenol and Addition Reaction Reaction to Quinonemethides', Phosphorus, Sulfur, and Silicon and the Related Elements, 95: 1, 537 — 538
To link to this Article: DOI: 10.1080/10426509408034307
URL: http://dx.doi.org/10.1080/10426509408034307

Phosphorus, Sulfur, and Silicon, 1994, Vol. 95–96, pp. 537–538
Reprints available directly from the publisher
Photocopying permitted by license only

STABLE QUINONE METHIDES: REGIOSELECTIVE PARA-OXIDATION OF A 2,4-BISALKYLTHIOMETHYLPHENOL AND ADDITION REACTIONS TO QUINONE METHIDES

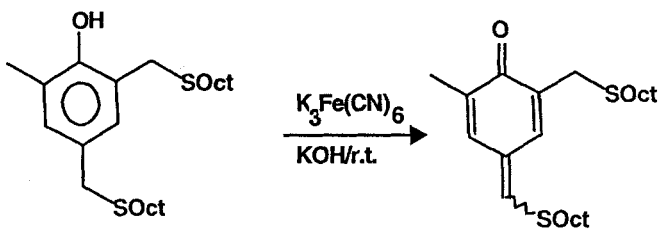
Hansrudolf Meier*, Hanspeter Kuenzi

Research Laboratories, Additives Division, CIBA Corporation, CH-1723 Marly 1

Hermann Fuhrer and Günther Rist

Physics Department, CIBA Corporation, CH-4000 Basel

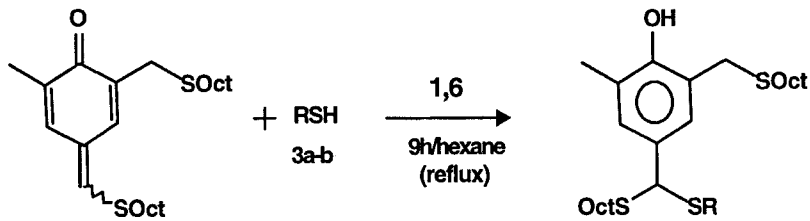
The 2,4-bisfunctionalized phenol **1**, a commercial antioxidant, is dehydrogenated *regioselectively* with potassium ferricyanide, affording the corresponding p-quinone methide **2**. 1,6-Addition of nucleophiles e.g. thiols to **2** gives rise to the corresponding addition products e.g. the dithioacetals **4** of the corresponding substituted benzaldehyde. On the other hand, treatment of **2** with α,α'-azoisobutyronitrile at 90°C leads to compounds **5a-b** and **6**, addition products of the cyanopropyl radical to the quinone methide **2**. The structures of all products are confirmed mainly by ^{1}H-NMR- and ^{13}C-NMR-spectroscopy and the mode of their formation is discussed.



1 **2** (98 %)

(Oct = n-octyl)

Literature: Hermann Fuhrer, Hanspeter Künzi, Hansrudolf Meier and Günther Rist, *Helvetica Chimica Acta, 77*, 655 (1994).



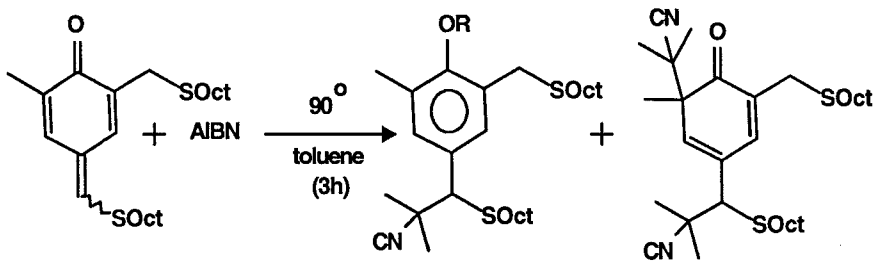
2 4a-b

(76-98 %)

a: R = Oct

b: R = CH_2COOCH_3

(Oct = n-octyl)

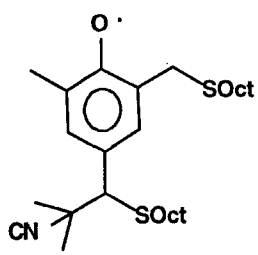


2 5a-b 6

a: R = $C(CH_3)_2CN$

b: R = H

Yields: 5a: 41 %; 5b: 5.5 %; 6: 14 %



(postulated intermediate)