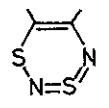
REACTION OF N_4S_4 WITH ACETYLENES

Masashi Tashiro, Shuntaro Mataka, Kazufumi Takahashi and Yukihiro Yamada
Research Institute of Industrial Science, Kyushu University
Hakozaki, Higashi-ku, Fukuoka, Japan

The reaction of N_4S_4 with diphenylacetylene(1a), phenyl-(1b), p-bromophenyl-(1c), and tolylacetylene(1d), dimethyl acetylenedicarboxylate(1e), methyl phenylpropiolate(1f), methyl propiolate(1g) and dibenzoyl acetylene(1h) was investigated.

In all cases, the corresponding 1,2,5-thiadiazoles were obtained as a major product and the following compounds were isolated as by-products: 1,3,2,4-dithiadiazine(2) on the reaction with 1a; 3-amino-1,2,5-thiadiazole(3) and (1,2,5-thiadiazolo)dithiatriazapentalene (4-1 or 4-2) with 1b-d; 1,2,3,4,7-trithiadiazepine (5), 1,2,4-thiadiazole(6) and the compound(7) of the molecular formula of $C_3H_3O_2N_3S_3$ with 1e; 2,5,6,7 and 1,2,3-thiadiazole(8) with 1f; 3,5 and 7 with 1g; 2 and 5 with 1h.



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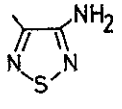

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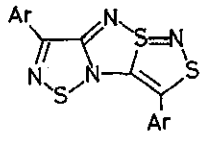

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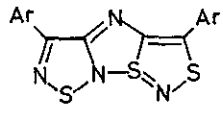

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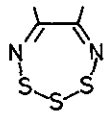

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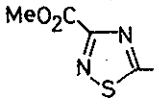

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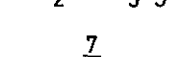

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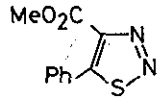

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