## O-ACYL DERIVATIVES OF POLYNITROALKANES IN REACTIONS WITH ELECTROPHILIC REAGENTS

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The O-acyl derivatives of the aci-form of trinitromethane (I) [1] when reacted with electrophilic reagents A-B (where A is the "electrophilic" and B is the "nucleophilic" part of the reagent) form the corresponding trinitromethyl derivatives (II)

The following reactions were run: reagent A-B, value of A in A-C(NO<sub>2</sub>)<sub>3</sub> (II), yield of (II),% (for R = CH<sub>3</sub>): 1) HCl (gas), H, 76; 2) Cl<sub>2</sub>, Cl, 60; 3) Br<sub>2</sub>, Br, 61; 4) I<sub>2</sub>, I, 8; 5) ICl, I, 17; 6) 2, 4-(NO<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>SCl, 2, 4-(NO<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>S, 30; 7) N<sub>2</sub>O<sub>4</sub>, NO<sub>2</sub>, 9; 8) FClO<sub>3</sub>, F, 5; 9) ClN  $\bigcirc$  Cl, 55. All of the obtained compounds were identified by comparison with authentic specimens. In the case of N-chloropiperidine, together with (II) (A = Cl), we isolated product (III) (N-acetylpiperidine, 59% yield), which corroborates the proposed scheme.

The O-acyl derivatives of the gem-dinitroalkanes react with electrophiles in a similar manner

$$\begin{array}{c} RC(NO_2)_2 \odot Ag \oplus + CH_3COCl \xrightarrow{-AgCl} & C = N \\ O_2N & O - C - CH_3 \\ O & O \\ \hline \\ R = H, CH_3; X = Cl, Br \end{array}$$

## LITERATURE CITED

1. S. A. Shevelev, V. I. Erashko, B. G. Sankov, and A. A. Fainzil'berg, Izv. Akad. Nauk SSSR, Ser. Khim., 382 (1968).

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