

pale yellow mass which became fluid at the temperature of the room, and set in the freezing mixture.

The benzol solution gave a semi-crystalline green mass which remained solid at the room temperature. The benzol solution when allowed to stand for some time deposited crystals which, when filtered off and dried on a porous tile, melted at 192°.

Both the residues above mentioned on being exposed to air for 48 hours turned red. It appeared to be impossible to isolate from either of these residues a definite crystalline product, although the benzol residue was to a large extent crystalline.

The behaviour of the residues dissolved in concentrated sulphuric acid was quite similar. They dissolved with a deep red colour. A crystal of potassium bichromate makes the colour markedly deeper.

The methyl alcohol residue was heated in a test tube over a free flame. A lively reaction ensued and alcohol was given off. The oil set to a crystalline mass. This was dissolved in alcohol and water added, and comes down again as a light brown substance identified with the 1:4-methyl phenyl pyrazolone melting at 192°, not sharp. It was also identified by the pyrazolone reaction with sulphuric acid and ferric chloride.

The benzol residue gave a similar yield of the same compound.

The Action of p. Bromphenyl Hydrazine.

2 grams of formyl phenyl acetic ester were dissolved in 100 ccs. of methyl alcohol and 100 ccs. of benzol respectively, and allowed to stand 24 hours. After this time the calculated quantity of the hydrazine was added and the mixture allowed to stand at ordinary temperature. After a lapse of 12 hours the benzol solution had become turbid, and after 24 hours had deposited a somewhat large quantity of crystals. These were filtered off and the solution evaporated in vacuo at the ordinary temperature.

The crystals so obtained after crystallization from alcohol in which they are sparingly soluble, melted with decomposition at 255° and gave the pyrazolone reaction.

The solution on evaporation gave a semi-solid mass, which was placed on porous plates and washed with a little alcohol and recrystallized from alcohol, in which it is quite soluble when hot and only slightly so when cold. It has also a melting point of 255°. It gave the following numbers on analysis :

0.1030 gram gave 0.0614 gram AgBr.

Calculated for, $C_{15}H_{11}N_2BrOBr = 25.41\%$.

found, $Br = 25.36\%$.

The methyl alcohol solution on being treated in the same way gave a yellow paste which did not solidify but stiffened in the freezing mixture.