

heated at 60° for 10 min, poured into brine, and extracted with ether (40 ml). Direct treatment of the ethereal extract with a stock 2,4-dinitrophenylhydrazine solution precipitated the 2,4-dinitrophenylhydrazone of the aldehyde. The carboxylic acid was isolated from the filtrate by extraction with aqueous sodium hydroxide, acidification, and solvent extraction. It was finally purified by either recrystallization or sublimation. All products were characterized by comparison with authentic compounds.

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