added in small portions to a solution of 50 g. of ethylphenethyl ether in 50 g. of acetic anhydride. The temperature was maintained at about −5° during the addition and for several hours thereafter. After twenty-four hours an excess of sodium hydroxide solution was added, and the nitro compound was extracted with ether, washed and dried. Several lots were combined and subjected to repeated fractional distillation, using a short Vigreux column. The fraction of b. p. 129–134° (6 mm.) consisted of the ortho compound. A smaller fraction of b. p. 139–143° (6 mm.) was the para compound. The oxidation of portions of these fractions to the corresponding nitrobenzoic acids for confirmation of structure followed the method of Reimer and Gatewood.[2]

Anal. Calcd. for $C_{10}H_{13}NO_3$: C, 61.54; H, 6.67; N, 7.18. Found: C, 61.60, 61.54; H, 6.72, 6.88; N, 7.15.

***o*-Aminophenethylethyl Ether,** $C_2H_5OCH_2CH_2C_6H_4NH_2$.—Fifteen grams of ethylnitrophenethyl ether was treated in the customary manner with 28 g. of tin scraps and 60 cc. of concd. hydrochloric acid. When the first reaction ceased the flask was heated to 90–100° for one hour. The mixture was then made alkaline and distilled with steam. The distillate was acidified and shaken with ether: the ether layer was rejected. Following the addition of alkali the mixture was again extracted with ether; the ether extract was dried, the ether evaporated, etc. The product was a light yellow oil, b. p. 115–120° (4 mm.) with a pleasant, floral odor and a burning taste.

Anal. Calcd. for $C_{10}H_{15}NO$: C, 72.73; H, 9.09; N, 8.48. Found: C, 72.43; H, 8.99; N, 8.42.

***o*-Ethoxyethylphenylurea,** $C_2H_5OCH_2CH_2C_6H_4NHCONH_2$.—Aminophenethyl ethyl ether (1.65 g.) was dissolved in dilute alcohol and treated with 1.2 g. of nitrourea which was added in small portions. In two hours the precipitated urea was removed and washed with dilute acid, then recrystallized from a mixture of alcohol and ethyl acetate: colorless, amorphous compound, with very faint sweet taste, m. p. 155–156°.

Anal. Calcd. for $C_{11}H_{16}N_2O_2$: C, 63.46; H, 7.69; N, 13.46. Found: C, 63.40; H, 7.85; N, 13.29, 13.40.

The research is being continued in this Laboratory.

ORGANIC CHEMISTRY LABORATORY
UNIVERSITY OF ARKANSAS
FAYETTEVILLE, ARKANSAS

RECEIVED AUGUST 10, 1937

---

(2) M. Reimer and E. S. Gatewood, THIS JOURNAL, **42**, 1475 (1920).

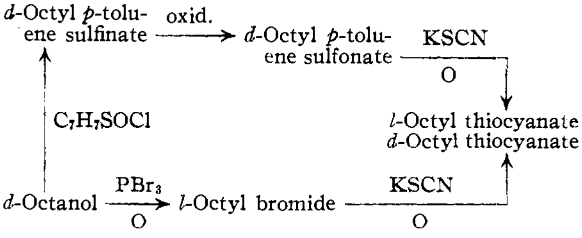
COMMUNICATIONS TO THE EDITOR

BETA-OCTYL THIOCYANATE

Sir:

By the interaction of potassium thiocyanate and (−)-β-octyl bromide Rose and Haller [THIS JOURNAL, **58**, 2648 (1936)] prepared (+)-β-octyl thiocyanate, a compound which had been obtained previously by the interaction of β-octyl *p*-toluenesulfonate and potassium thiocyanate [Kenyon, Phillips and Pittman, *J. Chem. Soc.*, 1081 (1935)]. Although the recorded refractive index and other physical properties of this compound prepared by the two different methods are in excellent agreement, there is a marked difference in the densities of the two specimens and accordingly we have looked into the matter. Our laboratory record shows that while the refractive index of the beta-octyl thiocyanate was determined with the freshly prepared specimen the density was not taken until some six months afterward. We have now redetermined the density of the thiocyanate, using this time a specimen newly prepared from β-octyl *p*-toluenesulfonate and find d^{20}_4 0.914, a value in good agreement with that of Rose and Haller; it thus appears that the compound slowly decomposes on keeping.

The specific rotatory powers of (+)-β-octyl thiocyanate in the homogeneous state have been recalculated using the amended value for the density, they are $[\alpha]^{20}_{5893}$ +62.0°, $[\alpha]^{20}_{5461}$ +74.9°, $[\alpha]^{20}_{4358}$ + 121.5°. Since *d*-octanol by one series of reactions gives rise to *l*-octyl thiocyanate and by the other to *d*-octyl thiocyanate, it seems highly probable that, as surmised by Rose and Haller, a Walden inversion occurs in each of the three reactions where a bond of the asymmetric carbon atom is involved and that the two processes take place according to the scheme (where *d*- and *l*- denote configurations)



DEPARTMENT OF CHEMISTRY
BATTERSEA POLYTECHNIC
LONDON, S. W. 11, ENGLAND

W. F. H. JACKMAN
J. KENYON

RECEIVED OCTOBER 20, 1937