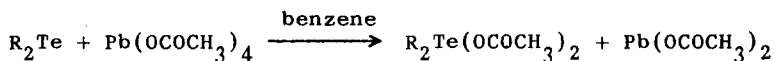


SYNTHESIS OF ORGANOTELLURIUM ACETATES

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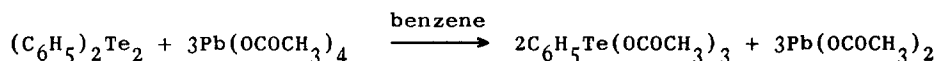
Although the syntheses and reactions of organotellurium halides have been studied in detail<sup>1-3</sup>, no attempts have been made to synthesize organotellurium acetates. The communication reports on the synthesis of diorganotellurium diacetates via a simple reaction:



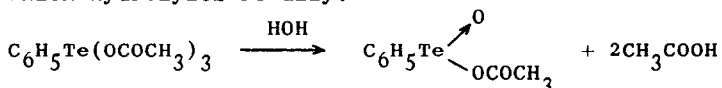
(R = C<sub>6</sub>H<sub>5</sub> ; p-C<sub>2</sub>H<sub>5</sub>OC<sub>6</sub>H<sub>4</sub> ; p-CH<sub>3</sub>OC<sub>6</sub>H<sub>4</sub> ; p-CH<sub>3</sub>C<sub>6</sub>H<sub>4</sub> ; C<sub>6</sub>F<sub>5</sub> etc.)

The reaction goes to completion at room temperature giving diorganotellurium diacetates in quantitative yields.

Analogous reaction of diphenyl ditelluride yields triacetate (as shown by nuclear magnetic resonance spectroscopy):



which hydrolyzes readily:



The reaction is being further investigated.

To a benzene solution of lead tetraacetate (0.01 mole) was added with stirring a solution of diphenyl telluride (0.01 mole) in benzene. An immediate precipitation of lead(II) acetate was found to occur. Filtration, evaporation of benzene followed by crystallization from benzene/hexane (10 parts/90 parts) gave pure diphenyltellurium diacetate. Yield:- 98<sup>o</sup>/o; m.pt. 136-138<sup>o</sup>(decomp.). The structure of the compound has been deduced from satisfactory analytical data and IR

[ $\nu(\text{C} = \text{O})$ :-  $1650 \text{ cm}^{-1}$ ,  $1275 \text{ cm}^{-1}$ ] and PMR [ $\text{CH}_{\text{arom}}$ ):- 2-2.5 $\tau$ , ( $\text{CH}_3$ ):- 8.1 $\tau$  ; proton ratio:- 10/6] spectra.

The studies regarding hydrolysis, exchange reactions, thermal stability and various spectral data (low frequency infrared, mass spectra etc.) for these new compounds are in progress.

#### REFERENCES

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