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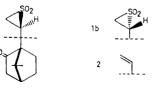
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Epimeric 2-[(1S)-7,7-Dimethyl-2-oxo-1-norbornanyl]-thiirane-1,1-dioxides

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The reaction between diazomethane and the intermediate sulphene produced by treatment of (1S)-camphor-10-sulphonyl chloride with triethylamine has been reported to give a thiiranedioxide (m.p. 83–85°). 12 We have repeated this experiment. The two epimeric thiiranedioxides (1a and 1b) thus formed have now been separated by thin layer and column chromatography on silica gel. The mixture of epimers as well as each of the two pure isomers decomposed when heated above their melting points yielding the known (1S)-7,7-dimethyl-1-vinyl-2-norbornanone (2). 1,2



1a

above their known (1/2 rnanone (2/2 1)

norbornanyl]-thiirane-1,1-dioxides (la and lb). The mixture of the epimeric thiiranedioxides (1a and 1b) was prepared from (1S)-camphor-10-sulphonyl chloride (m.p. $67-68^{\circ}$; $[\alpha]_{D}^{21}$ +30°, c 2.0 in CHCl₃) according to the procedure of Opitz and Fischer.1,2 The two compounds could be separated by TLC (Merck Silica gel HF₂₅₄), e.g. when eluted with ethyl ether, R_E values were 0.55 and 0.77. The epimers were separated on preparative scale by column chromatography (silica gel/ethyl ether) to yield a low-melting isomer (R_F 0.77; m.p. 81-86° dec.; approximate yield 70 %; $[\alpha]_{\rm D}^{21}$ -5.6°, c 3.1 in CHCl₃) and a highmelting isomer (R_F 0.55; m.p. 100 – 106° dec.; approximate yield 15 %; $[\alpha]_D^{21}$ – 58.6, c 0.8 in CHCl₃). The two isomers exhibited similar IR spectra: ν (CHCl₃) 1735 (C=O), 1320 and 1160 (SO₂) cm⁻¹.² The compounds were insufficiently stable at room temperature for meaningful elemental analysis. However, they could readily be characterized by heating to (1S)-7,7-dimethyl-1-vinyl-2-norbornanone (2) (m.p. $65-66^{\circ}$; $[\alpha]_{D}^{21}+16^{\circ}$, c 3.3 in CHCl3).1,2

Experimental. 2-[(18)-7,7-dimethyl-2-oxo-1-

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On the Electrical Properties of Pd₁₇Se₁₅, Pt₅Se₄, and PtTe ARNE KJEKSHUS

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Only sparse information is available on the low temperature electrical behaviours of transition metal pnictides and chalcogenides. Moreover, the few investigations hitherto have been concerned with phases having relatively simple compositions and crystal structures. Therefore, it was considered worthwhile to study a few phases which do not satisfy the above

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