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Rough Viscosities to 10 000 Bars*

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The viscosities of six fluids have been measured to 10 000 bars at room temperature.

INTRODUCTION

IN a previous paper[1] the melting curves of several hydrocarbons were investigated, and the suggestion made that propane and propylene would be superior to the commonly used pentanes for pressure transmitting media by virtue of their materially lower freezing points at 10 000 bars. Before a complete evaluation of their characteristics could be made, however, a knowledge of their viscosities was necessary. Accordingly, a viscometer was built, and measurements were made of six substances. These measurements, though having an absolute accuracy of only a few percent, do indeed support the superiority of propane and propylene as pressure transmitting fluids, and seem to be of sufficient interest to warrant publication at this time.

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[1] L. E. Reeves, G. J. Scott, and S. E. Babb, Jr., J. Chem. Phys. 40, 3662 (1964) (preceding article).