

Reprinted from THE JOURNAL OF CHEMICAL PHYSICS, Vol. 40, No. 12, 3666-3668, 15 June 1964
Printed in U. S. A.

Rough Viscosities to 10 000 Bars*

STANLEY E. BABB, JR., AND GENE J. SCOTT

Department of Physics, University of Oklahoma, Norman, Oklahoma

(Received 14 February 1964)

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

INTRODUCTION

IN a previous paper¹ 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 transmit-

ting 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.

* This work was partially supported by a grant from the University of Oklahoma Faculty Research Fund.

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