show a smooth and near linear increase with increasing pressure.

These characteristics, and the unusual compressional hysteresis reported by Bridgman (2), and the fine grained textural homogeneity of massive pyrophyllite, appear sufficient to explain the effective performance of this material in ultra high pressure gasketing applications.

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References

- (1) P. W. Bridgman; Proc. Am. Acad. Arts Sci., 81, p 167 (1952).
- (2) _____; Am. Jour. Sci., 237, p 7 (1939).
- (3) A. Abey and H. D. Stromberg; A.S.M.E. paper 69-WA/PT-1 (1969).
- (4) P. W. Bridgman; Phys. Rev., <u>48</u>, p 825 (1935).
- (5) _____; Jour. Geology, 44, p. 653 (1936).
- (6) _____; Proc. Am. Acad. Arts Sci., 71, p 387 (1937).
- (7) _____; Rev. Mod. Phys., 18, p 1 (1946).

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