

## Thermodynamic Properties of the Fluorinated Olefin R-1234ze(Z) from Acoustic Measurements

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The speed of sound in gaseous cis-1,3,3,3-tetrafluoroprop-1-ene (R1234ze(Z)) has been determined at temperatures between 305 K and 405 K and at pressures up to 1.8 MPa from measurements of the acoustic and microwave resonance frequencies of a small volume (268 cm<sup>3</sup>) quasi-spherical resonator. Ideal gas heat capacities and acoustic virial coefficients have been directly interpolated from the data. The coefficients of a virial equation of state were obtained from the acoustic data by modelling the intermolecular potential with a hard-core square-well.