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6.6 Concluding remarksProblems; Chapter 7. Equations of State; 7.1 Ideal gas law; 7.2 Van der Waals' equation of state; 7.3 Law of corresponding states; 7.4 Isotherms or isobars in the two-phase region; 7.5 Concluding remarks; Problems; Chapter 8. Liquefaction of Gases; 8.1 Liquefaction by cooling - method (i); 8.2 Liquefaction by expansion - method (ii); 8.3 The Joule-Thomson effect; 8.4 Linde liquefaction plant; 8.5 Inversion point on p-v-T surface for water; 8.6 Concluding remarks; Problems; Chapter 9. Thermodynamic Properties of Ideal Gases and Ideal Gas Mixtures of Constant Composition
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11.2 Energy of formation

Sommario/riassunto

Although the basic theories of thermodynamics are adequately covered by a number of existing texts, there is little literature that addresses more advanced topics. In this comprehensive work the author redresses this balance, drawing on his twenty-five years of experience of teaching thermodynamics at undergraduate and postgraduate level, to produce a definitive text to cover thoroughly, advanced syllabuses.The book introduces the basic concepts which apply over the whole range of new technologies, considering: a new approach to cycles, enabling their irreversibility to be taken into a