

Question 1

One of the assumptions of the kinetic theory of gases states that “there is no force of attraction between the molecules of a gas.” How far is this statement correct? Is it possible to liquefy an ideal gas? Explain.

Solution:

The above statement is valid. At high-temperature gas, molecules movement become faster such that there is no intermolecular attraction. Under this condition, gas behave like an ideal gas. It is impossible to liquefy an ideal gas since ideal gas has no force of attraction between the gaseous molecules.