

Question 7

Why does the boundary between the liquid phase and gaseous phase disappear on heating a liquid to critical temperature in a closed vessel? In this situation what will be the state of the substance?

Solution:

The boundary between the liquid phase and gaseous phase disappear on heating a liquid up to critical temperature in a closed vessel because at the critical point the densities of liquid and the vapour become equal. The fluid at this stage is called 'supercritical fluid'