

Marks
4

- A phase diagram of a pure compound has a triple point at 20 °C and 0.25 atm, a normal melting point at 25 °C, and a normal boiling point at 87 °C.

Describe what happens when the pressure is reduced from 2 atm to 0.05 atm at a constant temperature of 15 °C?

Describe what happens when the temperature is raised from 13 °C to 87 °C at a constant pressure of 1.25 atm?

Which is more dense, the solid or the liquid? Explain your reasoning.