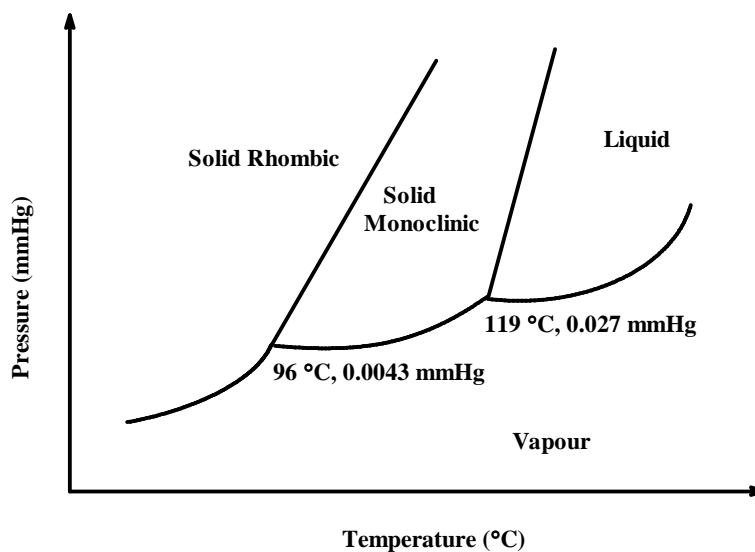


- Solid sulfur can exist in both rhombic and monoclinic forms. A portion of the phase diagram for sulfur is reproduced schematically below.

Marks
6



How many triple points are there in the phase diagram?

What phases are in equilibrium at each of the triple points?

What phase is stable at room temperature and 760 mmHg pressure?

Can monoclinic sulfur exist in equilibrium with sulfur vapour at 1.0 atm pressure?

Which solid form of sulfur is more dense? Explain your reasoning.

Describe the phase changes that occur when sulfur at 0.01 mmHg is slowly warmed from 90 °C to 130 °C.