

## Chapter 10

1. What are the desirable properties of supercritical fluids?

Ans: (a) Liquid like density

(b) Gas like viscosity

(c) Reduction in surface tension

(d) Higher diffusivity than liquids

2. What is drawback of CO<sub>2</sub> as supercritical fluid?

Ans: It cannot extract polar solutes.

3. What is disadvantage of NO as supercritical fluid?

Ans: Explosive

4. What is disadvantage of H<sub>2</sub>O as supercritical fluid?

Ans: High P<sub>c</sub> (>220 bar) and T<sub>c</sub>(>370 °C) and water becomes corrosive at these conditions.

5. Name one modifier and mention its role.

Ans: 1-10% methanol in CO<sub>2</sub> to solubilize polar solutes.