

- Barium sulfate is used as a contrast agent for X-ray images of intestines. What is the solubility product constant,  $K_{sp}$ , for  $\text{BaSO}_4$ , given that a maximum of  $1.167 \times 10^{-8}$  g will dissolve in 500 mL of water?

**Marks**  
**4**

Answer:

What advantage would there be in administering  $\text{BaSO}_4$  as a slurry that also contains 0.5 M  $\text{Na}_2\text{SO}_4$ ?

**THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.**