

Answer on the question #42321, Chemistry, Physical Chemistry

Question:

List 4 substances that would turn litmus paper red.

Solution:

The main use of litmus is to test whether a solution is acidic or basic.

Litmus (pH indicator)

below pH

above pH

4.5

8.3



4.5



8.3

Wet litmus paper can also be used to test water-soluble gases; the gas dissolves in the water and the resulting solution colors the litmus paper. For instance, ammonia gas, which is alkaline, colors the red litmus paper blue.

According to the information above, we should use the acidic solutions.

1. Hydrochloric acid HCL
2. Solution of sodium bisulphate NaHSO_4
3. Solution of aluminum nitrate $\text{Al}(\text{NO}_3)_3$ – pH = 2.5 – 3.7
4. Acetic acid CH_3COOH