

ACIDS, BASES & SALTS

(v) Describe a test for chlorine.

0620/42/M/J/16-Q4

test

result

[2]

(f) Sulfuric acid reacts with a hydrocarbon called benzene to produce benzenesulfonic acid, $C_6H_5SO_3H$. Benzenesulfonic acid is a strong acid which ionises to produce hydrogen ions, H^+ , and benzenesulfonate ions, $C_6H_5SO_3^-$.

0620/43/O/N/16-5

(i) What is meant by the term *strong acid*?

..... [1]

(ii) Describe how to show that a 1 mol/dm^3 solution of benzenesulfonic acid is a strong acid.

.....

..... [2]

(iii) Write a chemical equation for the reaction between benzenesulfonic acid and sodium carbonate, Na_2CO_3 .

..... [2]