

CHLOROFORM

May contain alcohol and ether, hydrochloric and hypochlorous acids, sulphurous acid when the chloroform has been treated with sulphuric acid and has not been left in contact with binocide of manganese previous to its final rectification, and some exceedingly injurious methyl compounds when it has been prepared from wood spirit instead of alcohol.

Alcohol and ether may be detected by adding water to a measured quantity of chloroform contained in a graduated tube. On shaking and allowing the mixture to settle, the volume of the chloroform will be found to have diminished. A green colour will also be produced on treating the adulterated article with chromate of potassa and sulphuric acid.

Hydrochloric acid¹ may be detected by its acid reaction, and by extraction with water and application of the usual tests.

Hypochlorous acid by its bleaching power.

Sulphurous acid by the iodine test.

Methyl compounds by shaking the chloroform with sulphuric acid, when a brown colouration will be produced.

The specific gravity should be 1.496 or 1.500.

SULPHATE OF QUININE.

Salicine may be detected by warming with sulphuric acid, when a red colour will be produced.

Starch by a solution of iodine, or by boiling for a few minutes with a drop of sulphuric acid, cooling, adding sulphate of copper and excess of potassa, and heating gently, when red oxide of copper will be precipitated.

Sugar by the same test, or by precipitating with carbonate of potassa, evaporating the filtrate nearly to dryness, extracting with alcohol, and testing the filtrate for sugar.

Stearine by treating with dilute acid, which dissolves the quinine and leaves the fat, which melts on the application of heat.

Earthy impurities may be detected by incinerating the mixture and thoroughly burning off the carbon, which requires long heating. Their nature can then be determined. Carbonate and sulphate of lime are sometimes employed.