SCHEDULE 2

METHODS OF ANALYSIS

PART II

11.

DETERMINATION OF MOLYBDENUM

Determination

6.2.—(6.2.1) Transfer a suitable aliquot of the solution, prepared as in 6.1, to a 125 ml separating funnel, add 1 ml ammonium ferrous sulphate solution (3.6) and sufficient N hydrochloric acid (3.3) to bring the volume to 50 ml (see NOTE), then add 1 ml potassium thiocyanate solution (3.7) and mix. Add 1 ml stannous chloride solution (3.9) and mix again. Add exactly 7 ml solvent mixture (3.1), shake vigorously for two minutes and allow to separate for fifteen minutes. Filter the lower layer through a 7 cm paper into a small stoppered tube. (If the lower layer is not clear or if filtration is difficult, filter through a suitable column packed with anhydrous sodium sulphate (3.8), solid stannous chloride and plugged with cotton wool).

(6.2.2) Carry out a blank determination repeating the procedure but omitting the sample. Measure the absorbance of the solutions at a wave length of 470 nm, in the spectrophotometer (4.1) with water as reference. Determine the quantity of molybdenum in the solution by reference to the calibration curve (6.3).