

The Determination of the Inorganic Constituents of Hevea Latex

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Analytical methods used at the Rubber Research Institute of Malaya for the determination of the major inorganic constituents of latex are described. None of these is new but some of them have not previously been applied to the analysis of rubber total solids.

The ashing procedure is important. We agree with van der Bie that gentle ignition in an alkali medium, followed by digestion of the ash in acid solution is essential in the determination of phosphorus. We have shown that very slow ignition of an acidified rubber sample is required for the estimation of the metallic constituents.

The cobaltinitrite estimation of potassium has been shown to give correct results if precipitation takes place at a controlled temperature and an arbitrary conversion factor of 6.52 is used in the range 0.2 to 1.0 mgm. potassium.

The method of Drosdoff and Nearpass for magnesium has given consistent results provided the amount of magnesium present is in the higher part of the range (0 to 0.125 mgms. magnesium).

In the range of concentrations of calcium and magnesium found in rubber (Mg: Ca = 10:1) the oxalate method is satisfactory provided the calcium content is within the limits 1 to 5 mgms.

