

**DRY ANALYTICAL ELEMENT AND METHOD FOR THE
COLORIMETRIC DETERMINATION OF LITHIUM ION**

Abstract

A multilayer analytical element has been
5 prepared for use in the accurate colorimetric
determination of lithium ion found in aqueous
specimens. The element includes first and second
reagent layers underneath a porous spreading layer. A
more precise assay at longer read times of dye
10 formation and reduced rate of background dye
development are achieved because the second reagent
layer contains both an aromatic phenol organic solvent
and a perfluoroalkyl surfactant which were formerly
included only in the first reagent layer. A 14-crown-
15 4-ether derivative dye is used to complex with lithium
ion to provide the colorimetric signal.

(Figure 2)