

THE USE OF XRF IN SOLVING PROBLEMS RELATED TO THE PRODUCTION OF ACTIVE PHARMACEUTICAL INGREDIENTS (API)

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X-ray fluorescence (XRF) analysis is a powerful analytical technique that is capable of detecting and quantitating elements ranging from boron (B) through uranium (U). At Pharmacia, XRF is used to help solve many problems that are related to the production of active pharmaceutical ingredients (API's). These problems range from the quantitation of a metal in an API to supplying a means of establishing an identity test for inorganic or metal containing reagents. The lack of suitable standards limits the quantitative capability of XRF in the pharmaceutical industry. Our primary use for XRF is the characterization of unknown solids found in API's as well as the rapid screening for possible metals contamination. Examples of the various uses of XRF for API's will be described in detail.