

Title (en)

METHOD FOR MIXING A QUANTITY OF LIQUID IN A CONTAINER FOR AN ANALYSIS, A MIXING AND MEASURING NEEDLE AND METHOD FOR MANUFACTURING THE NEEDLE.

Title (de)

VERFAHREN ZUM MISCHEN EINER FLÜSSIGKEITSMENGE IN EINEM BEHÄLTER FÜR EINE ANALYSE, EINE MISCHUNGS- UND MESSNADEL UND VERFAHREN ZUR HERSTELLUNG DER NADEL.

Title (fr)

PROCEDE POUR MELANGER UNE QUANTITE DE LIQUIDE DANS UN RECIPIENT EN VUE D'UNE ANALYSE, AIGUILLE DE MELANGE ET DE MESURE ET PROCEDE DE FABRICATION DE L'AIGUILLE.

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Abstract (en)

[origin: WO9325309A1] The present invention relates to a method for mixing of a liquid quantity for an analysis, and a mixing and measuring needle (1) which is suited for it. According to the invention for the mixing a needle (1) is used comprising a flowing duct (3) having at its end at least one aspiration and discharge opening (4), and the mixing is carried out by keeping the opening in a cuvette (6) or other such mixing container below the liquid surface (10) and by carrying out the mixing with a to-and-fro motion, wherein liquid is alternately aspirated from the container to a flowing duct of the needle and squirted back from the flowing duct into the container. The essence of the invention is that the flowing duct (3) has a necking (19) extending essentially to the opening (4) at the end of the duct, in the length of which duct the flow resistance of the duct is growing at least to tenfold, wherein at discharge stages from the opening according to the vena contracta phenomenon an at first convergent and thereafter turbulently divergent liquid flow (20) is discharged. The mixing can be combined with the measuring taking place in the needle simultaneously, wherein the needle is gradually emptied of the liquid to be measured. According to the invention the point part of the needle (1) is conical and has at least one opening (4) which has been directed aside from the longitudinal axis of the needle. The needle (1) can be manufactured by electroforming.

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