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HYDRANAL® Information Bulletin

37859 HYDRANAL-Buffer Base
Pack sizes: 500 mL, 1 L

In many laboratories in the chemical and pharmaceutical industry as well as in other laboratories, water determination in nitrogen compounds has to be carried out according to the Karl Fischer method.

Due to the fact, that the course of the Karl Fischer reaction is strongly influenced by the pH, many of these nitrogen compounds cause troubles in this titration.

Weak basic compounds do not influence the pH-value and can be determined with standard procedures.

Strong basic compounds shift the pH of the medium in the titration vessel above 7.5, where a side reaction takes place and the titration will not find an endpoint.

By use of HYDRANAL-Buffer Base, this side reaction can be prevented. 1 mL neutralizes 1 mmol base. Ideal titration agents in combination with HYDRANAL-Buffer Base are 34805 HYDRANAL-Composite 5 or 34806 HYDRANAL-Composite 2.

Procedure:
30-40 mL HYDRANAL-Buffer base are filled into the titration vessel and titrated to dryness with HYDRANAL-Composite.
Then a defined amount of sample containing 20-30 mmol water is added and its water content titrated with HYDRANAL-Composite.

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