

## HYDRANAL® LabInfo

### 34738 HYDRANAL-KetoSolver Pack sizes 500 mL, 1 L

#### Use

HYDRANAL-KetoSolver is a working medium for volumetric water determination in ketones and aldehydes according to Karl Fischer. It is used, depending on the samples analyzed, in combination with HYDRANAL-Composite 5 or HYDRANAL-Composite 5 K.

Ketones and aldehydes perform a side reaction with regular Karl Fischer reagents and are therefore disturbing the course of the reaction. With methanol as solvent, ketones react and produce ketals and water as a byproduct. In addition to acetal formation, aldehydes undergo a bisulfite addition that consumes water.

HYDRANAL-KetoSolver contains as a main component 1-methoxy-2-propanol. The above-mentioned side reactions are mostly suppressed in this solvent. This allows simple and reliable water determinations in a variety of aldehydes and ketones using HYDRANAL-KetoSolver. With many ketones, the regular volumetric titration agent HYDRANAL-Composite 5 can be used. Aldehydes and certain strongly reactive ketones like e.g. trifluoroacetone or diacetyl require the use of HYDRANAL-Composite 5 K as titration agent.

#### Environment and Toxicity

HYDRANAL-KetoSolver is free of halogenated hydrocarbons and does not have to be labeled with a hazard symbol. This reagent is biodegradable.

#### More Information

In addition to this LabInfo, a wide range of brochures about HYDRANAL-Reagents as well as the HYDRANAL-Manual, a 120-pages textbook on Karl Fischer titration are available.

This product information will be sent on request. Please find additional information on water determination according to Karl Fischer and online information requests on [www.sigma-aldrich.com/hydranal](http://www.sigma-aldrich.com/hydranal).

#### Contact

If you have any further questions regarding the water determination according to Karl Fischer please do not hesitate to contact us:

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