

Validity of certified Novasina humidity standards

Novasina offers humidity standards with European EA (European cooperation for Accreditation) certificate.

In this case, every humidity standard is checked by a EA accredited laboratory, and is supplied with the original certificate. The humidity standard is labelled with the same reference number as shown on the certificate. There is no validity expiration date.

Companies certified according to ISO standards can decide by themselves how often the relative humidity resp. aw-value measuring instruments have to be checked again with newly certified humidity standards. This can be every e.g. 6 months, 12 months or even 24 months.

Important is that this period of time is clearly stated in your Quality Manual (SOP).

Novasina is supplier of saturated salt solutions, which can be used as often as desired over many years, as long as they are correctly saturated and not damaged. Please also refer to the instructions delivered with each salt.

Statement concerning UKAS calibration **uncertainty** and readings quoted on certificates, against the instrument or calibration salt **accuracy** quoted by the manufacturers and the Greenspan report

The uncertainty and accuracy of calibration are two different things.

Uncertainty of the calibration process (as written on a UKAS traceable certificate, for example) refers only to the overall uncertainty of calibration *possible by the accredited laboratory carrying out the calibration*. Some calibration laboratories have better uncertainties than others, depending on the quality of their reference standards and their laboratory procedures. Most UKAS humidity and temperature labs have an uncertainty of around +/- 2% RH and 0.3°C.

Accuracy refers to the ability of the salt or instrument to give *repeatable* readings and has been recorded in the Greenspan report to be around +/- 0.3% RH for most saturated salts but is quoted independantly by the hygrometer manufacturer of typically +/- 1.0 RH, based on their own development tests.

Should I use **uncertainty** of the UKAS accredited certificate and its reported readings of the instrument tested or should I use the manufacturer's or Greenspan stated **accuracy**?

Use the UKAS quoted uncertainty and reported readings on the certificate just to independantly verify the performance of the hygrometer or salt (for example during a quality audit only). Always use the manufacturer's and Greenspan stated accuracy for use of an instrument or salt in a process, quality measurements or as a reference standard etc.. This is provided that the instrument or calibration salt are properly maintained and adjusted working to the manufacturer's original specification.

