



Ultra low volume cuvette (ZEN2112)



Description

The ZEN2112 is a quartz batch cuvette designed for the size and molecular weight measurement of small volumes of sample in a Zetasizer Nano series system.



It is a Hellma cell that has been specially modified to enable measurement of as little as 12 microlitres of sample with the systems that use backscatter optics such as the Zetasizer Nano S, and 20 microlitres with systems with 90 degree optics such as the Zetasizer Nano S90.

The cuvette has a high optical quality that makes it ideal for the measurement of small, poorly scattering samples such as proteins.

The sample chamber is 3mm x 3mm x 5mm (WxDxH) that expands to a 10mm circular aperture at the top.

Using a 3mm x 3mm path length makes filling the cell without entraining air easier than with smaller cross section cells.

Filling the cuvette

Filling the chamber completely requires 45µl of sample, but it does not have to be entirely filled to enable a measurement to be done.

A standard precision pipette capable of accurately dispensing these low volumes will reach the bottom of the chamber to allow filling from the bottom up.

Cleaning the cuvette

The cuvette should be cleaned as soon as possible after the measurement to prevent sample drying onto the cuvette windows. This is particularly important if the measurement was done at elevated temperatures, for example after a protein melting point experiment.

The cell should be immersed in a glass cleaning solution such as Hellmanex. The cleaning process is faster and more effective if the cleaning solution is at a higher temperature, say 60°C and low power ultrasonication applied.

Specifications

Minimum sample volume	12µl Zetasizer Nano S, ZS 20µl Zetasizer Nano S90, ZS90
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Construction material	Quartz, polypropylene cap
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Number of windows	3
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