

# Formaldehyde

How BrightSpec's nanoMRR measures challenging chemicals

## Measuring Formaldehyde is Challenging

Formaldehyde lacks strong chromophores or fluorophores, complicating direct detection. These characteristics demand specialized methodologies, such as derivatization or modified stationary phases, to ensure accurate quantification. Addressing these analytical hurdles is critical for industries and laboratories where precise formaldehyde measurements are essential for process and product development.

## A Novel Detection System

Rotational spectroscopy leverages the unique rotational transitions of molecules, enabling the direct and highly specific measurement of formaldehyde across various matrices. This technique eliminates interference from other compounds, ensuring precise detection. The nanoMRR combines speed, specificity, and adaptability, making it a powerful tool for formaldehyde detection in diverse settings.

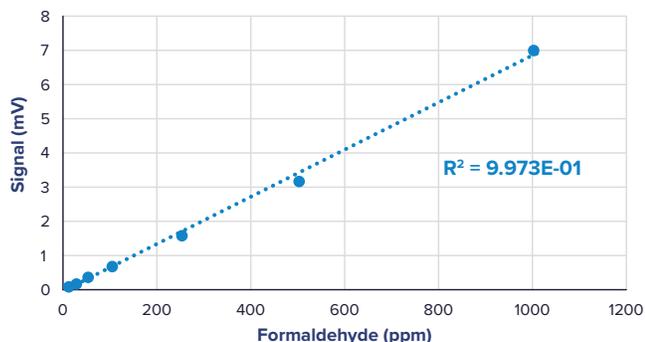
## Why Use nanoMRR?

- Direct measurement of formaldehyde with no derivatization
- No columns or chromatography
- Simple benchtop solution
- Just 25 nL of sample required for analysis



Using BrightSpec's nanoMRR platform, 100ppm of formaldehyde is quantifiable in water in less than 5 minutes.

Formaldehyde Dose Response



## Powerful Quantitation

The NanoMRR platform offers a powerful and flexible solution for formaldehyde detection, delivering a linear response from 15 ppm to 1000 ppm. Unlike conventional methods that require time-consuming and error-prone sample preparation, the NanoMRR achieves these results with direct sample injection, streamlining workflows and minimizing operational complexity. The nanoMRR redefines how formaldehyde is quantified.

Learn more at [BrightSpec.com](https://BrightSpec.com)