

Turbidity Standards



Summary of Features & Benefits:

- Non toxic and non carcinogenic
- Highly accurate
- US EPA approved
- 2 year shelf life for all values
- Traceable to NIST
- Ready to use - our range covers the full turbidity measurement range

Reagecon's turbidity standards for ratio and non-ratio instruments are composed of suspended polymer microspheres. These turbidity standards remove the handling, stability and accuracy problems associated with traditional Formazin turbidity standards; (for detailed comparison, see Table 1).

Turbidity Measurement

Accurate and precise laboratory or online analytical measurement can be influenced by the following 6 key parameters:

- Measuring Instrument
- Measuring Accessories
- The Sample
- The Operator
- Standards and Reference Material
- Measuring Environment

The technical validation, comparability, quality control/assurance, proficiency testing and traceability of any analysis require significant attention to detail of all these parameters. Turbidity measurement is no different in this respect.

The Standard / Reference Material

The nephelometric turbidity meter is designed to be routinely standardised with a known light scattering standard. As with all analytical standards or reference materials, a turbidity standard should fulfil the following criteria:

- Provide traceability.
- Demonstrate the accuracy of results.
- Calibrate the equipment and methodology.
- Monitor the user performance.
- Validate the test.
- Facilitate comparability i.e. to ensure that when the correct procedures have been followed the same analysis of the same materials will produce results that agree with each other whenever they are performed.

Standards and Reference materials should be produced and characterised in a technically competent manner, should be homogenous, stable, certified and have available a known uncertainty of measurement. Presently, there are only two types of standards recognised and approved by the USEPA, Standard Methods, ASTM and other regulatory agencies, these are formazin or formazin derived standards and suspended polymer microspheres.