

TRACEABILITY EXCEPTION:

DELTA VALUE ISOTOPE RATIO MEASUREMENTS

Delta value isotope ratio measurements that cannot presently be made traceable to the SI should be made traceable to materials* recognised as International Standards. Since at present, values assigned to these materials are based on consensus values, these materials are not listed in the Appendix C of the BIPM Database.

* A list of certified reference materials that should be used to identify accepted references for delta value isotope ratio traceability statements is published and maintained by IUPAC:

Willi A. Brand, Tyler B. Coplen, Jochen Vogl, Martin Rosner and Thomas Prohaska Assessment of international reference materials for isotope-ratio analysis (IUPAC Technical Report)

Pure Appl. Chem. 2014, 86(3), 425-467

The report is available for free download: http://www.degruyter.com/doi/10.1515/pac-2013-1023

The CIPM notes that assigned values for replacement materials should be done through a formal internationally vetted procedure that assures the continued comparability of delta value measurements.

The CIPM encourages the continuation of programmes within the NMIs to develop absolute isotope ratio measurement values for such Reference Materials and active engagement with the IUPAC community.

Traceability exception approved by the CIPM in March 2015 See <u>Decision CIPM/104-26</u>