



Australian Government
National Measurement
Institute

**Certification of a Reference Material in Accordance with
Regulation 48 of the *National Measurement Regulations 1999* (Cth)
in Accordance with the *National Measurement Act 1960* (Cth)**

Name or description of reference material: Aqueous ethanol solution.

Permanent distinguishing marks: Bottles labelled with batch number ETOH 23-03.

Date on which property values of reference material were established: 19 September 2023.

Date of certification: 4 October 2023.

Date of expiry of certificate: 10 October 2024.

Certified property value of reference material: 4.91 g of ethanol per kg of solution.

Uncertainty of property value: ± 0.07 g of ethanol per kg of solution ($k=2.0$).

This uncertainty is calculated in accordance with the principles of the *JCGM 100: 2008 -Evaluation of measurement data - Guide to the expression of uncertainty in measurement*, with an interval estimated to have a level of confidence of greater than 95 % at the time of certification.

Storage of the reference material at 4 - 10 °C is recommended.

Signature:

A handwritten signature in black ink, appearing to read 'Raluca Iavetz', written over a horizontal line.

Date: 4 October 2023

Name of Signatory: Raluca Iavetz

Being a person with powers delegated by the Chief Metrologist acting under Section 18D of the *National Measurement Acts 1960* (Cth) in respect of regulation 48 of the *National Measurement Regulations 1999* (Cth), I hereby certify that the above reference material is certified in accordance with the regulations.