



**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 22-03.

**Date on which property values of reference material were established:** 28 September 2022.

**Date of certification:** 10 October 2022.

**Date of expiry of certificate:** 10 October 2023.

**Certified property value of reference material:** 4.93 g of ethanol per kg of solution.

**Uncertainty of property value:**  $\pm 0.07$  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: 10 October 2022

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.