

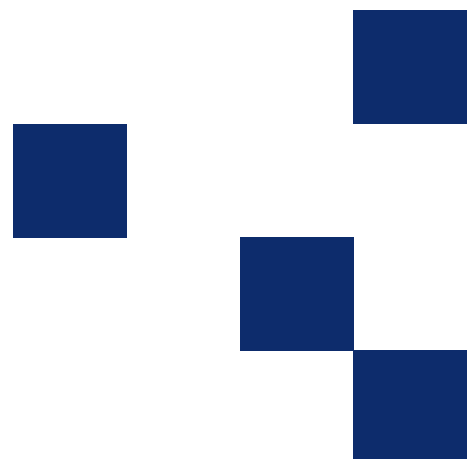


**Transport**  
Roads & Maritime  
Services

# Test method T1024

## Conductivity of water

NOVEMBER 2012



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## Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary added	D. Dash	Jun 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	November 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T1024 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

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# Test method T1024

## Conductivity of water

### 1. Scope

This test method sets out the procedure for determining the conductivity of water or aqueous solutions using the Metrohm Conductometer E518 conductivity meter.

### 2. Apparatus

- (a) Conductivity meter and suitable immersion cell with platinised platinum electrodes.
- (b) Laboratory glassware such as beakers, flasks, etc.
- (c) (Calibrated thermometer of range  $-10^{\circ}$  to  $50^{\circ}\text{C}$ ).

### 3. Procedure

- (a) Condition the immersion cell by soaking in deionized water for at least 3 hours, but preferably overnight.
- (b) Bring a sufficient volume of sample to allow immersion of the cell, to  $20^{\circ}\text{C}$ .
- (c) Set the conductivity meter parameters as given in the instruction manual and the temperature control to  $20^{\circ}\text{C}$ .
- (d) Thoroughly rinse the immersion cell with the sample liquid, immerse it in the sample liquid at  $20^{\circ}\text{C}$  and measure the conductivity
- (e) If more than one sample is to be measured, set the meter temperature control to the temperature of the original sample from 3(b) above. Immerse the immersion cell in the sample and adjust the temperature coefficient control to bring the conductivity to that measured in 4(d) above. The conductivity of all other samples will now be temperature compensated to  $20^{\circ}\text{C}$ .
- (f) Set the temperature control to the temperature of the sample to be measured. Thoroughly rinse the immersion cell with sample before each new conductivity determination, and measure the conductivity.
- (g) When testing is completed, rinse the immersion cell with deionised water and store immersed in water.

### 4. Reporting

Report the conductivity at  $20^{\circ}\text{C}$  in Siemens to the first decimal place.