



Transport
Roads & Maritime
Services

Test method T120

Moisture content of road construction materials (Standard method)

OCTOBER 2012



Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D. Dash	May 1999
Ed 2/Rev 0	All	General revision and reformatting.	G. Donald	September 2007
Ed 3/Rev 0	All	Cross reference AS 1289.2.1.1	D Hazell	Jan 2010
Ed 3/Rev 1	2(a)(b), 3(ii)	New format. Clarify when to use lower temperatures. Correlation requirement. Added references. Clarify constant mass temperatures.	D Hazell	Oct 2011
Ed 4/ Rev 0	All	Reformatted RMS template	J Friedrich	October 2012

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

The most recent revision to Test method T120 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T120

Moisture content of road construction materials (Standard method)

1. Scope

This test method sets out the standard method for the determination of the moisture content of road construction materials as a percentage of its dry mass using an oven.

2. General

- (a) This method is the standard method for the determination of moisture content. However, lower temperatures are used when material contains minerals with crystalline water (e.g. gypsum) or organic matter
- (b) Subsidiary methods used to determine moisture content (e.g. T121 Moisture Content of Road Construction Materials (Sand Bath or Hot Plate Method) or T180 Moisture Content of Road Construction Materials (Microwave Oven Method)) must be correlated with T120 in accordance with T2105 Correlation of Moisture Content with Standard Method
- (c) The following documents are referred to in this test method:
 - (i) T105 Preparation of Samples for Testing (Soils)
 - (ii) AS 1289.2.1.1 Soil moisture content tests – Determination of the moisture content of a soil – Oven Drying method (standard method)

3. Apparatus, Preparation, Procedure, Calculations and Reporting

This test method is identical to AS 1289.2.1.1 except for the following amendments:

- (a) In Clause 4.1, carry out sample preparation in accordance with T105 and not AS 1289.1.1
- (b) 'Constant Mass' requires the procedures described in Clauses 4(b) to (g) at a temperature (T) in the range 105°C to 110°C with the following exceptions:
 - (i) Use a temperature of not more than 50°C where required by another test method
 - (ii) Use a temperature of not more than 80°C where the material contains minerals with crystalline water (e.g. gypsum) or organic matter
 - (iii) Where a temperature other than 105°C to 110°C is used:
 - Adjust the minimum time interval between successive drying periods to $(100 / T_{avg})$ h
 - Report the maximum temperature (T) and minimum time interval
- (c) Include reference to this test method in the report