



# Test method T1551

## Low temperature impact test for plastic materials

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	June 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 T1551 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

# Test method T1551

## Low temperature impact test for plastic materials

### 1. Scope

This test sets out the procedure for determining the effect of mechanical impact on plastic materials at low temperature.

### 2. Apparatus

- (a) A thermostatically controlled cold box capable of maintaining temperature within range  $-9^{\circ}\text{C}$  to  $-11^{\circ}\text{C}$  or as specified
- (b) A specimen holder. This apparatus consists of
  - (i) The frictionless guide to enable the steel ball to impact the same spot in the centre of the specimen
  - (ii) The steel ball of the mass of  $1.03 \pm 0.01\text{kg}$
  - (iii) Base plate with holders to keep the specimen horizontal, not permitting its dislocation after an impact

### 3. Preparation

Duplicate sections (600 mm in length) are cut. The samples may be subjected to any specified treatment prior to testing.

### 4. Procedure

- (a) The selected sections of the material are conditioned in the cool box for two hours  $\pm$  ten minutes prior to the impact testing
- (b) The specimens shall be removed from the cold box one at a time and placed in the horizontal position so that the frictionless tube guides the ball to fall onto its central point from the height of 1.5mm. The specimen is held in position at both ends
- (c) The specimen shall be subjected to five successive impacts on the same spot within one minute of removal from the cold box

### 5. Reporting

Report temperature of test and any evidence of physical failure viz. cracking, splitting or fracture. If none, report as free from damage.

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