

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

2 December 2016

Sub-Committee of Experts on the Transport of Dangerous Goods

Fiftieth session

Geneva, 28 November–6 December 2016

Item 2 (d) of the provisional agenda

**Recommendations made by the Sub-Committee
on its forty-seventh, forty-eighth and forty-ninth sessions
and pending issues: electric storage systems**

Lithium Battery T2 Thermal Test

Transmitted by PRBA – The Rechargeable Battery Association and Recharge

Introduction

1. The document responds to comments on ST/SG/AC.10/C.3/2016/81 pertaining to the T.2 Thermal test in sub-section 38.3 of the UN Manual and when a safety protective component is activated during the test.
2. In Section 38.3.4.2.3, which provides the requirements for passing the T.2 Thermal test, add the underlined paragraph below to allow for testing at 65 ± 2 °C if a cell or battery safety protective component is activated when tested to the current standard. The activation of the protective component must also be validated by analysis and documented. This will still require testing to the current standard but provide a path forward without compromising safety.

38.3.4.2.3 Requirement

Cells and batteries meet this requirement if there is no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable to test cells and batteries at fully discharged states.

If the open circuit voltage of a cell or battery after testing is less than 90% due to activation of a safety protective component (e.g., current interrupt devices) integral to the cell or battery, the activation shall be validated by analysis and documented. If the safety protective component is accessible and resettable, testing may continue with the restored safety component. If the safety protective component is not resettable and/or accessible, testing may be conducted at 65 ± 2 °C instead of 72 ± 2 °C.
