DYNAMIS
Batterien

UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.5/Am.1 Section 38.3 – acc. UN Nos. 3090 and 3091

Certification of passed test for: **LI-110 (1/2 AA, ER14250)** 3.6V 1200mAh Lithium Thionyl Chloride Primary Cell

Test Requirement: Primary Cell = T.1 – T.5, T.6 and T.8, cylindrical cell diameter < 20mm

Test ID	Test Description	Requirement	Result
T.1 Altitude Simulation	Min. 6 hr @ ≤ 11.6 kPa	Mass loss limit 0.2%; No leakage, venting, forceful disassembly, rupture or fire; retained OCV > 90 % of initial OCV	PASSED
T.2 Thermal Test	10 Repetitions of: [6 hr @ 75±2 °C] & [6 hr @ -40±2 °C] change time max. 30min	Mass loss limit 0.2%; No leakage, venting, forceful disassembly, rupture or fire; retained OCV > 90 % of initial OCV	PASSED
T.3 Vibration	12 Repetitions of: 7 Hz to 200Hz to 7 Hz in 15 min, in x-/y-/z-direction, 8g peak acceleration	Mass loss limit 0.2%; No leakage, venting, forceful disassembly, rupture or fire; retained OCV > 90 % of initial OCV	PASSED
T.4 Shock	3 Times 150g-shocks in x-/y-/z-directions, pos. & neg. orientation	Mass loss limit 0.2%; No leakage, venting, forceful disassembly, rupture or fire; retained OCV > 90 % of initial OCV	PASSED
T.5 External Short Circuit	Cell is held @ 55 °C and shorted until 1 hr after cell case temperature returned to 55 °C	Case temperature does not exceed 170 °C and no disassembly, rupture or fire within 6hr after test	PASSED
T.6 Crush	Gradual crush between 2 flat surfaces @ 1.2 cm/s contact speed. Continue pressure to max. 13.0±0.78 kN *or* min. 0.1V drop *or* 50% deformation	Case temperature does not exceed 170 °C and no disassembly or fire within 6hr after test	PASSED
T.7 Overcharge	DOES NOT APPLY TO PRIMARY CELLS		
T.8 Forced Discharge	Discharge @ max. recomm. discharge rate for [rated cap/max disch rate] hr	No disassembly or fire within 7 days after finish of test	PASSED

The product LI-110 meets the requirement of this test procedure (No. RZUN2013-0346).

Completing Date: February 01, 2013