

UN Test Report

Name of Sample	Lithium Ion Battery 4UR18650-1-T1298
Consignor	STANDARD(Chongqing) CO.,LTD
Manufacturer	STANDARD(Chongqing) CO.,LTD
Test Method	United Nations "Recomenndations on the TRANSPORT OF DANGEROUS GOODS"
Criterion	United Nations "Recomenndations on the TRANSPORT OF DANGEROUS GOODS"
Appearance	Black rectangular parallelepiped
Test Date	T1-T5 2009/1/9-2009/2/6 T6 2013/05/21 T7 2009/1/12-2009/1/21 T8 2012/11/12 - 2012/11/19
Test Items	Altitude simulation, Thermal test, Vibration test, Shock test, External short circuit, Overcharged
Conclusion	The sample has passed the items of UN38.3.
Remark	Certification by Original Cell Model Certification by Similar Battery Model:4UR18650-1-T0916 Ratio of (4UR18650-1-T1298)/(4UR18650-1-T0916) [Wh rating ratio]: 103.5%, [Voltage ratio]: 100%
Consignor Address	NO.30 GAOYANG ROAD, HECHUAN INDUSTRIAL PARK, CHONGQING, CHINA

Sanyo Energy(Suzou) Co.,Ltd.

A. Kawamura

Approval

Jenny Hu

Check

Tina Song

Writing

CONFIDENTIAL

Date: January 26, 2016

B: Checklist for Judging New Type Battery or not

Confirmation of presence of change in "The element which is given influence"

(Change ⇒ ○、No change ⇒ -)

When there is no change in all items, it is NOT considered to be a New Type Battery.

Model which UN regulation test has completed	4UR18650-1-T0916
Target model which is not a new type	4UR18650-1-T1298

Test Item (Function)	The element which is given influence	Presence of change
T1: Altitude Simulation (Decompression load)	<ul style="list-style-type: none"> • Crimped part, Gasket (Cell) • Gas Release Vent, Cell Case (Cell) • Pack (Plastic) Case • Holding Member (Insulator, Insulation Tape, Both Sides Tape) • Coating materials 	-
T2: Thermal Shock (Repetition of high temp. and low temp.)	<ul style="list-style-type: none"> • Crimped part, Gasket (Cell) • Gas Release Vent, Cell Case (Cell) • Finished state of Wound Electrodes (Cell) • Pack (Plastic) Case • Holding Member (Insulator, Insulation Tape, Both Sides Tape) • Coating materials 	-
T3: Vibration (Vibration load)	<ul style="list-style-type: none"> • Finished state of Wound Electrodes (Cell) • Electric wiring member • Electronic Parts on a circuit board • Cell Holding Member (Adhesive, Both Sides Tape, Lib of Plastic Case) 	-
T4: Shock (Shock load)	<ul style="list-style-type: none"> • Wiring Member • Electronic Parts on a circuit board • Cell Holding Member (Adhesive, Both Sides Tape, Lib of Plastic Case) • Finished state of Wound Electrodes (Cell) 	-
T5: External Short Circuit (Short current)	<ul style="list-style-type: none"> • Over-voltage Protection • Current Control Device • Safety Device of cell (Cell) • Lead Tab 	-
T6 (Cell): Impact/Crush	<ul style="list-style-type: none"> • Separator (Cell) • Insulation State in a cell (Cell) 	-
T7 (Pack): Overcharge (Charge load)	<ul style="list-style-type: none"> • Overcharge Protection • Thermal Device • Safety Device of cell (Cell) 	-
T8 (Cell): Forced Discharge	<ul style="list-style-type: none"> • Finished state of Wound Electrodes 	-/NA *1
Wh of cell	Is Wh difference of cell less than 20%?	-
Voltage of cell	Is increase of cell voltage less than 20%?	-
Judgment result	New Type or not	New (Not new)

*1 Judgement has not applied if first checking was run under the UN test manual ver. 5 or former.

Sanyo Energy (Suzou) Co., Ltd.

A. Kawasumi

approval

Jenny Hu

Check

Tina Song

Writing

Certificate of UN test for Lithium ion battery

Customer Model : AS16A5K
 Global Code : BJ-AD40042AA
 Product Name : 4UR18650-1-T1298

Sanyo Energy (Suzhou) Co., Ltd.



T. Kura
 T.Kura Manager

We declare that this battery passed UN test.

Manual of Tests and Criteria (38.3 Lithium batteries)		Test results	Note	Number of test batteries/cells	
No.	Test item				
T 1	Altitude simulation	Pass		First cycle fully charged 4 batteries	After 50 cycles fully charged 4 batteries
T 2	Thermal test	Pass			
T 3	Vibration	Pass			
T 4	Shock	Pass			
T 5	External short circuit	Pass			
T 6	Crush	Pass		First cycle 50% charged 5 cells	
T 7	Overcharge	Pass		First cycle, Fully charged 4 batteries	After 50 cycles, Fully charged 4 batteries
T 8	Forced discharge	Pass		First cycle, fully discharged 10 cells	After 50 cycles, fully discharged 10 cells

*The test data may contain additional test result other than above table.

Lithium ion battery Specification

Item	Nominal value	Note
Watt-hour rating	41.4 Wh	
Nominal voltage	14.8 V	
Lithium equivalent content	3.36 g	

Above test procedures are compliant to the following manual.

(Manual of Tests and Criteria ST/AC.10/11, PartIII, sub-section 38.3, Rev.5A1 for cell, Rev.5A1 for battery)

Certificate of Package Drop Test for Lithium ion battery

Customer Model : AS16A5K
 Global Code : BJ-AD40042AA
 Product Name : 4UR18650-1-T1298

Sanyo Energy (Suzhou) Co., Ltd.



T. Kura

T.Kura Manager

We declare that this battery passed UN test.

Test item	Test results	Note
Package Drop Test	Pass	The package shall be dropped from 1.2m high on to a concrete surface (flat and horizontal) with five orientations (drop once a sample) ;

Lithium ion battery Specification

Item	Nominal value	Note
Watt-hour rating	41.4 Wh	
Nominal voltage	14.8 V	
Lithium equivalent content	3.36 g	

Above test procedures are compliant to the following regulation.
 (Model Regulations ST/SG/AC.10/1/Rev.18, Special Provision188)