



Date:May 13,2009


Sanyo Test Report

Name of Sample	Lithium Ion Battery 3UR18650-2-T0455
Consignor	STANDARD (Shanghai) Energy CO.,LTD
Manufacturer	STANDARD (Shanghai) Energy 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	2008/11/13 - 2008/12/12
Sample Number	24
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 Similar Model: 3UR18650ZT-2-FT-xx Ratio of (3UR18650-2-T0455)/(3UR18650ZT-2-FT-xx) [+]=100%, [-]=100%, [Electrolyte]=100% Same cell
Consignor Address	No.50,Rong-Teng Rd.,Songjiang Export Processing Zone,Shanghai,China, 201613

Sanyo Electric Co.,LTD
Mobile Energy Company
Battery System Development Management Department
Technical Administration Department


Approval


Check


Writing

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B: Checklist for Judging New Type Battery or not

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

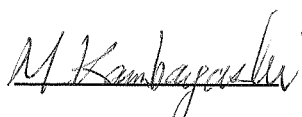
(Change ⇒ ○、No change ⇒ -)

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	3UR18650ZT-2-FT-xx
Target model which is not a new type	3UR18650-2-T0455

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(Crash load)	<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) 	-
Judgment result	New Type or not	New (Not new)

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approval



Check



Writing

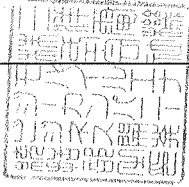
May. 13. 2009

Certificate of UN test for Lithium ion battery

Customer Model : UM09E36
 Sanyo Model : 3UR18650-2-T0455
 Sanyo Product Code : F13860600

SANYO Electric Co., Ltd.
 Mobile Energy Company
 Battery System Development
 Management Department

M. Kanbayashi
 M. Kanbayashi Senior Manager
 Technical Administration Department



Manual of Tests and Criteria (38.3 Lithium batteries)		Test results	Note	Number of test batteries		
No.	Test item			First cycle	After 50 cycles	After 50 cycles
T 1	Altitude simulation	Pass				
T 2	Thermal test	Pass				
T 3	Vibration	Pass	First cycle fully charged 4 batteries	First cycle fully Discharged 4 batteries	After 50 cycles fully discharged 4 batteries	
T 4	Shock	Pass				
T 5	External short circuit	Pass				
T 6	Impact	Pass	First cycle 50% charged 5 cells for cylindrical cell, 10 cells for prismatic cell, 5 cells for coin cell.	After 50 cycles fully charged 5 cells for cylindrical cell, 10 cells for prismatic cell, 5 cells for coin cell.	After 50 cycles, fully discharged 5 cells for cylindrical cell, 10 cells for prismatic cell, 5 cells for coin cell.	
T 7	Overcharge	Pass	For battery only	After 50 cycles fully charged 4 batteries	After 50 cycles, fully charged 4 batteries	
T 8	Forced discharge	-	For cell only			

Lithium ion battery Specification

Item	Nominal value	Note
Watt-hour rating / Rated capacity	63 Wh / 5.6 Ah	
Nominal voltage	11.1 V	

We declare the above : The test result mentioned above was checked according to UN test.
 (Manual of Tests and Criteria ST/SG/AC.10/11/Rev.4, PartIII, sub-section 38.3)

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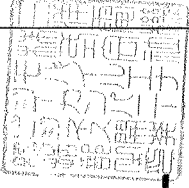
Certificate of Package Drop Test for Lithium ion battery

Customer Model : UM09E36
Sanyo Model : 3UR18650-2-T0455
Sanyo Product Code : F13860600

SANYO Electric Co.,Ltd.
Mobile Energy Company
Battery System Development
Management Department



M. Karbayashi Senior Manager
Technical Administration Department



Test item	Test results	Note
Package Drop Test	Pass	The package shall be dropped from 1.2meter high onto a concrete surface (flat and horizontal) with five orientations (drop once a sample); (1)flat on the bottom, (2)flat on the top, (3)flat on the long side, (4)flat on the short side, (5)on a corner

Lithium ion battery Specification

Item	Nominal value	Note
Watt-hour rating / Rated capacity	63 Wh / 5.6 Ah	
Nominal voltage	11.1 V	

We declare the above : The test result mentioned above was checked according to UN test.
(Model Regulations ST/SG/AC. 10/1/Rev.15, Special Provision188)