



TEST REPORT

Report No.: 32240510116

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Date: March 21, 2024

Name of Applicant.....: PINGHU SHUANGXI BABY CARRIER
MANUFACTURE CO.,LTD.
Address: XINCANG TOWN,PINGHU CITY,ZHEJIANG
PROVINCE,CHINA
Sample: RIDE ON CAR
Supplier: ---
Brand name: ---
Sample type.....: HLY8888
Date of received sample: February 20, 2024
Date of test: February 20, 2024 ---March 21, 2024
Test content: According to the client requirement
Method of test: Clause 4.25.1~4.25.10 of ASTM F963-23
Result: Pass
Test location: Bureau Veritas Testing Technical Service (Zhejiang)
Co.,Ltd
Address of lab.....: 1F west, 6F east, 7F east, 8F, Building B, No.66,
Qingyi Road, Ningbo, Zhejiang, China

Test by:

Nathan Mao

Engineer

Date:

March 21, 2024

Review by:

Jane Huang

Supervisor

Date:

March 21, 2024

Agree by:

Lei Zhang

Deputy Manager

Date: 检验检测专用章

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*Test result :

-Description of battery operated toy:

According to the safety standard ASTM F963-23, the test Age Grade is from 8-12 years old ;
Type of battery: for vehicle:DC12V, 7.0Ah, Lead-acid rechargeable battery X 2pc.

No remote control function;

Charger: type: input 100-120VAC, 50/60Hz, 1.5A; Output DC24V, 1000mA (provided);

Model:FY0422401000, Cert:E350715;

Electric operated function:Battery operated Motion, LED light and sound.

ASTM F963-23			
Clause	Requirement – Test	Result – Remark	Verdict
4.25	Battery-operated Toys—These requirements are intended to address potential risks of injury associated with battery usage in toys (for example, battery overheating, leakage, explosion and fire, and choking on or swallowing batteries).		-
4.25.1	The toy shall be marked permanently on the battery compartment or on the area immediately adjacent to the battery compartment to show the correct battery polarity using the polarity symbols “+” and “-”. Additional markings located on the toy or in the instructions shall indicate the correct battery size and voltage. These markings are not required for non-replaceable batteries or secondary batteries that, by design, can only be inserted in the correct orientation. Battery compartments for button cell or coin cell batteries are not subject to this requirement if it is not practicable to mark the battery compartment due to size limitations or other considerations; in such instances, markings required by this section shall be in the instructions. NOTE 14—The battery compartment door is considered part of the battery compartment.		P
4.25.1.1	Toys containing non-replaceable batteries shall be labeled in accordance with 5.14.	Rechargeable battery is non-replaceable battery	P
4.25.2	The maximum allowable direct current potential between any two accessible electrical points is 24 V nominal.		P



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4.25.3	Battery-operated toys shall be designed so that it is not possible to charge any non-rechargeable battery. This can be achieved through physical design of the battery compartment or through the use of an appropriate electrical circuit design. This applies to situations in which a battery may be installed incorrectly (reversed) or in which a battery charger may be applied to a toy containing non-rechargeable batteries, or both. This section does not apply to circuits having one or two non-rechargeable batteries as the only source of power.		P
4.25.3.1	Toys having a circuit powered only by button cell type batteries are not subject to this requirement.		N
4.25.4	Battery Accessibility—Battery accessibility before and after testing in accordance with 8.5 – 8.10 shall be determined in accordance with 4.25.4.1 or 4.25.4.2, as applicable. Testing is performed using the recommended batteries installed.		P
4.25.4.1	For toys intended for children less than 3 years old, no battery shall be accessible without requiring the use of a common household tool to access the battery(ies).	8-12 years	N
4.25.4.2	For all toys that utilize batteries which fit completely within the small parts test cylinder shown in Fig. 3, such batteries shall not be accessible without requiring the use of a common household tool to access the battery(ies).		N
4.25.4.3	If a fastener is used to secure the battery compartment, it shall remain attached to the toy or battery compartment cover, before and after testing in accordance with 8.5 – 8.10.		P
4.25.4.4	As an alternative to a common household tool, manufacturers are permitted to elect to use a specialty fastener (for example, Torx, Hex) to secure the battery compartment, in accordance with the requirements of 4.25.4, if the appropriate tool is included with the toy, and instructional material conforming to 6.9 is included.		N



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4.25.5	Batteries of different types or capacities shall not be mixed within any single electrical circuit. In applications requiring more than one type or capacity of battery to provide different functions or in applications requiring the combination of alternating current and non-rechargeable batteries, each circuit shall be isolated electrically to prevent current from flowing between the individual circuits.		N
4.25.6	The surfaces of the batteries shall not achieve temperatures exceeding 71 °C.	<71 °C	P
4.25.6.1	This requirement is applicable for all battery operated toys during normal use conditions. In addition, battery-operated toys intended for children 96 months or less shall meet this requirement after reasonably foreseeable abuse.		P
4.25.6.2	If external moving parts of the toy that are mechanically linked to the motor can be stalled by the user, test for a stalled motor condition according to the procedures of 8.17 to determine conformance with the temperature limits.		P
4.25.7	No condition shall occur that would cause the toy to fail the temperature requirements of 4.25.6 or present a combustion hazard as described in 4.25.		P
4.25.7.1	For rechargeable lithium ion or lithium ion polymer batteries, the toy shall comply with the temperature requirements of 4.25.10.8 during normal use charging and any discharging of the battery.	Not of lithium ion or lithium ion polymer batteries	N
4.25.8	Battery-operated toys shall meet the requirements of 6.5 for instructions on safe battery usage. Toys which use non-replaceable batteries as the only source of power are not subject to 6.5.	With non-replaceable battery	N
4.25.9	Battery-powered Ride-on Toys—These requirements apply to circuits within wheeled ride-on toys, not intended for streets or roadways, using a battery power source that is capable of delivering at least 8 amps into any variable resistor load for a minimum of one minute when tested in 8.18.2.		P



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4.25.9.1	The maximum temperature measured on the insulation of any conductor shall not exceed the certified temperature rating of the material when tested in accordance with 8.18.3.		P
4.25.9.2	Battery-powered ride-on toys shall not present a risk of fire when tested in accordance with the stalled motor test of 8.18.4.		P
4.25.9.3	A battery-powered ride-on toy designed with a wiring system that has a user replaceable device (fuse type) for the primary circuit protection or a wiring system with user resettable primary circuit protection (manual reset fuse) shall not actuate (open or trip) when tested in accordance with the nuisance tripping test of 8.18.5.		N
4.25.9.4	Switches used in battery-powered ride-on toys. (1) Polymeric materials in switches used in battery powered ride-on toys that are used to support current-carrying parts shall carry a minimum flame rating of UL-94 V-0 or have a glow wire ignition rating of 750 °C.		P
	(2) The switch body shall not result in a short-circuit condition when subjected to the switch endurance test and overload tests of 8.18.6.		P
	(3) The switch shall not fail in a mode that could cause the vehicle to run continuously (switch stuck in the “on” position) when subjected to the endurance test and the overload test in 8.18.6.		P
4.25.9.5	User replaceable circuit protection devices in battery-powered ride-on toys.		N
	(1) User replaceable circuit protection devices provided by the manufacturer in battery-powered ride-on toys shall be listed, recognized or certified by a Nationally Recognized Test Laboratory (NRTL) (that is, a laboratory recognized in accordance with 29 CFR 1910) to an appropriate electrical safety standard.		N
	(2) All circuit protection devices used in battery-powered ride-on toys intended to be replaced by the user shall be replaceable only with the use of a tool or by a design which does not easily allow tampering such as a design requiring excessive force to open.		N



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4.25.9.6	Batteries, as described in 4.25.9, and battery chargers. (1) Battery connectors shall be constructed of material with a UL 94 V-0 flame rating or have a glow wire ignition rating of 750 °C.		P
	(2) The battery charging system shall not present a risk of fire due to a short-circuit condition applied to any point in the length of a charger/battery interconnecting cable when tested in accordance with 8.18.8.		P
	(3) During charging, battery-charging voltages shall not exceed the recommended charging voltages when tested in accordance with 8.18.7.		P
	(4) Battery chargers shall be certified to the appropriate current national standard, for example UL, CSA, or equivalent standards body.	Battery charger had been approved by ETL	P
4.25.9.7	Wiring connected to the main/motor battery shall be short-circuit protected and shall not present the risk of fire when tested in accordance with 8.18.8.		P
4.25.9.8	Strain relief shall be provided to prevent mechanical stress on wires entering a connector block during routine maintenance such as battery charging, and tested in accordance with 8.18.9.		P
4.25.9.9	Battery-powered ride-on toys shall comply with the requirements in 5.14.1 for safety labeling, 6.6 for additional instructional literature, and 7.2 for required producer's markings.		P
4.25.10	Toys that Contain Secondary Cells or Secondary Batteries:		-



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4.25.10.1	Cells used in lithium ion or lithium ion polymer batteries incorporated into or included with toys shall have an attestation from the battery manufacturer or other evidence that the cells comply with at least one of the following standards: (1) ANSI C18.2M Part 2 for Portable Rechargeable Cells and Batteries, or (2) UL 1642, Standard for Lithium Batteries, or (3) IEC 62133 Secondary Cells and Batteries Containing Alkaline or Other Non-acid Electrolytes—Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, For Use in Portable Applications.	Not used in lithium ion or lithium ion polymer batteries -Lead-Acid battery	N
4.25.10.2	Lithium ion or lithium ion polymer batteries shall be compliant with one of the following standards: (1) ANSI C18.2M Part 2 for Portable Rechargeable Cells and Batteries, or (2) UL 2054, Standard for Household and Commercial Batteries, or (3) IEC 62133 Secondary Cells and Batteries Containing Alkaline or Other Non-acid Electrolytes—Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, For Use in Portable Applications or Equivalent Standards.		N
4.25.10.3	Batteries that contain lithium ion or lithium ion polymer cells shall be provided with an enclosure that provides protection against damage to the cells and their circuitry during normal use and foreseeable abuse of the toy as specified in 8.5 – 8.10.		N



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4.25.10.4	During charging with the provided charging device, no cell shall exceed the cell or battery manufacturer's specified charging voltage, current, and temperature values when tested in accordance with 8.19.1, 8.19.2, and 8.19.3. (1) For batteries charged outside of the toy, if the manufacturer provides documentation that the battery and charger have not been modified by the manufacturer; have been tested as a system and the chargers are compliant with one of the following standards, then the testing and measurements required by 8.19.1, 8.19.2, 8.19.3, and 8.19.4 can be omitted: (a) ANSI/UL 2595, General Requirements for Battery Powered Appliances (b) IEC 60950-1, Information Technology Equipment— Safety—Part 1: General Requirements		P
4.25.10.5	During charging or discharge with the provided charger and load, as well as during normal operation and stalled motor test per 8.17 if applicable, and when tested in accordance with 8.19.1, 8.19.2, 8.19.3, and 8.19.4, the maximum charge or discharge current of any cell shall not exceed the cell manufacturer's specifications. Lithium ion or lithium ion polymer cell(s) cutoff voltage shall not be less than the manufacturer's specified minimum in any operating mode. Momentary current spikes until safety devices actuate are to be disregarded.		P
4.25.10.6	Normal use charging and discharging of a secondary battery when tested in accordance with 8.19.1, 8.19.2, and 8.19.3, shall not result in surface temperature rises on any battery surfaces or any other accessible surface of the toy exceeding: (1) 25 °C if the surface is substantially metal, (2) 30 °C if the surface is ceramic or glass, (3) 35 °C if the surface is wood or plastic. If the battery is permanently installed in the toy, do not disassemble the toy to reach the battery.		P



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4.25.10.7	Battery chargers or power adaptors that plug into the electric mains power shall be listed by a Nationally Recognized Test Laboratory (NRTL) to an appropriate electrical safety standard. External connectors to chargers and batteries shall ensure that correct polarity is used during charging. Compliance is checked by visual inspection.	Battery charger had been approved by ETL	P
4.25.10.8	Circuit wiring connected to lithium ion or lithium ion polymer and NiMH secondary batteries shall be short circuit protected and shall not present the risk of fire when tested in accordance with 8.19.5. During these tests, temperatures on any accessible surfaces of any secondary battery shall not exceed 60 °C if the surface is plastic or 50 °C if the surface is metal, glass or ceramic. In addition, inaccessible surfaces of lithium ion batteries shall not exceed 71 °C or the cell manufacturer's maximum temperature, whichever is less. Cells shall not cause explosion or fire as evidenced by signs of burning of the battery including burning or charring of the combustible materials specified in the test. If cells vent, electrolyte shall not become accessible. Secondary batteries which are removable shall not be able to be short circuited by placing terminals of opposite polarity against a flat conductive surface, unless no hazardous condition results when tested per 8.19.5.1. For lithium ion or lithium ion polymer batteries, short circuit protection shall be incorporated into the battery.		N
5.14	Battery-operated Toys—Toys with non-replaceable batteries that are accessible with the use of a coin, screwdriver, or other common household tool shall bear a statement that the battery is not replaceable. If the manufacturer determines that it is impractical to label the product, this information shall be placed on the packaging or in the instructions.		P
5.14.1	Battery-powered Ride-on Toys:		P



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5.14.1.1	Battery powered ride-on toys shall carry safety labeling in accordance with 5.3, consisting of the signal word “WARNING” and contain, at a minimum, text which clearly conveys the following: (a) To reduce the risk of injury, adult supervision is required. Never use in roadways, near motor vehicles, on or near steep inclines or steps, swimming pools or other bodies of water; always wear shoes, and never allow more than ____ rider(s) (b) RISK OF FIRE. Do not bypass. Replace only with ____.		P
5.14.1.2	The packaging or point-of-sale literature of battery powered ride-on toys shall state the manufacturer’s recommended user age or weight limitations for use of the toy, or both.		P
5.14.1.3	The packaging or point-of-sale literature of battery powered ride-on toys shall bear the warnings as specified in 5.14.1.		P
5.14.2	Button or Coin Cell Batteries: 5.14.2.1 The following requirements are applicable to consumer replaceable button or coin cell batteries that are 1.5 volts or greater, regardless of the chemistry, and are greater than 15 mm in diameter and fit within the small parts cylinder. The packaging and instructions of toys that operate from such button or coin cell batteries shall carry safety labeling in accordance with 5.3.		N
	(1) The packaging of toys that operate from such button or coin cell batteries shall indicate on the package the following: "Warning: Contains button or coin cell battery. Hazardous if swallowed—see instructions.		N



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	(2) The instructions of toys that operate from such button or coin cell batteries shall carry safety labeling in accordance with 5.3. The language shall be placed along with any other battery information that is included in the instructions (that is, how to change battery, etc.). If there are no instructions included with the product then the required labeling shall appear either on the package or in an insert packed with the product. The labeling shall consist of the alert symbol followed by the signal word “WARNING” and contain, at a minimum, the following text or equivalent text which clearly conveys the same information: “This product contains a Button or Coin Cell Battery. A swallowed Button or Coin Cell Battery can cause internal chemical burns in as little as two hours and lead to death. Dispose of used batteries immediately. Keep new and used batteries away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.”		N
5.3	Safety Labeling Requirements—Certain toys, and in some cases their packaging or their instructions, or both, are required to carry safety labeling to comply with this specification.		P
8.5	Normal Use Testing—These tests are intended to simulate normal use conditions so as to ensure that hazards are not generated through normal wear and deterioration. The object of these tests shall be to simulate the normal play mode of the toy, and the tests are therefore unrelated to the reasonably foreseeable abuse tests of 8.6 – 8.13.		P
8.5.1	Washable Toys—Toys described as machine washable on the toy, package, or instructions shall be subjected to six machine washing and tumble drying cycles, as described in 8.5.1.1, unless a different drying method is specified by the toy manufacturer by means of a permanent label. They shall then be inspected for compliance with this specification.		N



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8.6	Abuse Testing—The tests described in 8.7 – 8.13 are to simulate the exposure of a toy to mechanical damage through dropping, throwing, and other actions likely to be performed by a child, which are characterized as reasonably foreseeable abuse.		P
8.8	Torque Tests for Removal of Components—Any toy with a projection, part, or assembly that a child can grasp with at least the thumb and forefinger or the teeth shall be subject to this test.		P
8.9	Tension Test for Removal of Components—Any projection of a toy that a child can grasp with at least the thumb and forefinger or the teeth shall be subjected to this test.		P
8.10	Compression Test—Any area on the surface of a toy that is accessible to a child and inaccessible to flat surface contact during the impact test shall be subject to this test.		P
8.11	Tests for Tire Removal and Snap-in Wheel and Axle Assembly Removal—These tests relate to the requirements of 4.17.		N
8.12	Flexure Test—This test is for determining compliance with 4.10, for wires or rods used as flexible skeletons.		N
8.13	Test Methods for Mouth-actuated Toys and Mouth actuated Projectile Toys:		N
6.5.1 6.5.2	battery per circuit, the instructions or the toy shall be marked with the following (or equivalent) information. Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc), or rechargeable batteries.		N



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6.6	Battery-powered Ride-on Toys—Instructions supplied with battery-powered ride-on toys shall contain guidance for safe use and maintenance of the toy. The instructions shall include at least the following: 6.6.1 Maximum weight or age limitations, or both, for safe use of the toy, 6.6.2 The kinds of surfaces which are appropriate for safe use of the toy, 6.6.3 The warning statements contained in 5.14.1.1, 6.6.4 Only use the battery(ies) specified by the manufacturer, and 6.6.5 Only use the charger(s) specified by the manufacturer.	70Kg max.	P



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Attachment: Sample Photos



Figure 1



Figure 2



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Figure 3



Figure 4

-----End of report-----