

TEST REPORT EN ISO 25649-1 Floating leisure articles for use on and in the water - Part 1: Classification, materials, general requirements and test methods	
Report Number:	KOT-2023051863C
Date of issue:	May,09.2023
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Testing Laboratory:	Shenzhen KOT Testing Technology Co.,Ltd
address	7/F, Building 1, Xunyuan Zhichuanggu Industrial Park, Fengtang Avenue, Fuhai Street, Baoan District, Shenzhen
Applicant's name:	HUIZHOU SAVA BICYCLE CO., LTD.
Address:	Huaguo Village, Xinxu Town, Huiyang District, Huizhou City, Guangdong Province, China
Test specification:	
Standard :	EN ISO 25649-1: 2017
Test procedure:	Test report
Non-standard test method:	N/A
Test Report Form No:	EN ISO 25649-1
Test Report Form(s) Originator:	VDE Testing and Certification Institute
Master TRF:	Dated 2016-11
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Test item description:	motorized surfboard
Trade Mark:	SAVA
Manufacturer:	Same as applicant
Model/Type reference:	SAVA motorized surfboard
Ratings:	60V

Name and address of the testing laboratory : Shenzhen KOT Testing Technology Co.,Ltd
7/F, Building 1, Xunyuan Zhichuanggu Industrial Park, Fengtang Avenue, Fuhai Street, Baoan District, Shenzhen


Date of Test:

Apr. 29, 2023 to May. 09, 2023


Prepared by(Engineer):

Alina Li

Reviewer(Quality Manager):

Jamie Zou

Jack Yu

Approved&Authorized Signer(Manager):

<p>List of Attachments (including a total number of pages in each attachment): Attachment I : 2 pages for Photo documentation.</p>	
<p>Summary of testing:</p>	
<p>Tests performed (name of test and test clause): EN ISO 25649-1: 2017 The submitted samples were found to comply with the requirements of above specification.</p>	<p>Testing location: Shenzhen KOT Testing Technology Co.,Ltd 7/F, Building 1, Xunyuan Zhichuanggu Industrial Park, Fengtang Avenue, Fuhai Street, Baoan District, Shenzhen</p>
<p>Copy of marking plate:</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p>motorized surfboard Model: SAVA motorized surfboard Input: 60V</p>  <p>HUIZHOU SAVA BICYCLE CO., LTD. Huaguo Village, Xinxu Town, Huiyang District, Huizhou City, Guangdong Province, China</p> <p style="text-align: right;">Made in China</p> </div>	
<p>Remark on above marking: 1, The height of CE symbols is more than 5 mm; 2, The height of WEEE symbols is more than 7 mm;</p>	

Test item particulars :	
Classification of installation and use: N.A	
Supply Connection: Not connected to the mains:	
Possible test case verdicts: - test case does not apply to the test object.....: N - test object does meet the requirement.....: P (Pass) - test object does not meet the requirement.....: F (Fail)	
Testing :	
Date of receipt of test item: Apr. 29, 2023	
Date (s) of performance of tests: Apr. 29, 2023 to May. 09, 2023	
General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a comma / <input checked="" type="checkbox"/> point is used as the decimal separator. Clause numbers between brackets refer to clauses in IEC 62196-2	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 02:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	Yes Not applicable
General product information: 1. All the test results comply with the requirement of relevant standards. 2. All the models are identical to testing model except for model name	

5	General safety requirements and test methods related to all classes	P
5.1	<p>General</p> <p>Floating leisure articles for use on and in the water shall be designed in a way that they are safe and usable for persons of a minimum age of 36 months and above, also in deep water where the user is out of its standing depth.</p>	P
5.2	<p>Body entrapment</p> <p>General</p> <p>Introduction</p> <p>Floating leisure articles shall not have accessible design features that may cause body entrapment. This requirement is deemed to be met if the following requirements are met and the specified test procedures prove that body entrapment does not occur.</p>	P
5.3	<p>Torso entrapment on safety line with regard to children</p>	P
5.4	<p>Accessible protruding parts causing entanglement</p> <p>Requirements</p> <p>To prevent the user from entanglement when unintentionally sliding out or from a device, there shall be no hazardous protrusions. The test rope shall slip of any part of the device that protrudes in the area</p> <p>where the user intentionally and foreseeably interacts with the product.</p>	P
5.5	<p>Human subject testing</p> <p>General</p> <p>Testing for all specific parts of ISO 25649 depends highly on testing with human test subjects. Due to the very nature, diversity and disparity of the products concerned instrumental testing by using apparatuses, devices, etc. is not recommended. Also the use of rigid loads and distinct load application points should be replaced by positioning human test subjects. This approach is appropriate to adapt to the flexibility and irregularity of the products. Therefore the determination and selection of an adequate test panel is of utmost importance. The same applies consequently for the assessment panel. Standard Model Cases how to determine and select test panels exist and can be adapted to the needs of this project.</p>	P

5.6	<p>Design working pressure Requirements</p> <p>The recommended working pressures (if applicable) shall be specified by the manufacturer for each main buoyancy chamber of the fully inflated device. These pressures shall be indicated on the device and in the operator's instruction manual (see ISO 25649-2). If for any reason working pressure is not given, inflate until full shape and functionality is achieved. Where relevant, the sequence of inflation shall be numbered next to the chamber's inflation valves.</p>		P
5.7	<p>Load bearing components Requirements</p> <p>If not otherwise stated in the specific parts all load bearing fittings, e.g. lifting and carrying handles, fittings for safety ropes, etc. shall be compatible with the material of the hull itself and shall not, when loaded as described in 5.7.2, break or result in any impairment in air tightness or water integrity</p>		N
5.8	<p>Towing device Requirements</p> <p>If not otherwise stated in the specific parts, floating articles shall be equipped with means to attach a towing rope in case of an emergency. This means shall withstand a horizontal pulling force without any damage to the fitting and the entire structure according to 5.8.2.</p>		P
5.9	<p>Valves and valve adapters Requirements</p> <p>Inflating and/or deflating valves shall be made of corrosion-resistant materials, shall be compatible with the material of the hull and shall not be capable of damaging the device.</p>		P
5.10	<p>Edges, corners and points Requirements</p> <p>All devices shall be of a design such that they cannot cause harm to the user. Edges and corners of hard and rigid materials shall be chamfered or rounded.</p>		P
5.11	<p>Shearing and crushing points Requirements</p> <p>Floating articles not specifically excluding the use by children shall meet the requirements regarding parts moving against each other as specified in EN 71-1:2005, 4.10.1 d) and 4.10.2. Floating articles for adult use only shall have no accessible shearing and/or crushing points. Shearing and crushing points exist if the distance between two rigid movable parts is less than 25 mm.</p>		P

5.12	<p>Strength of the hull and test conditions Requirements</p> <p>If applicable, the device shall remain airtight after each of the tests below (see 5.12.2 to 5.12.5).</p>		P
5.13	<p>Buckles and other fixings Requirements</p> <p>If buckles or other detachable fastening devices are used as parts of the entire device in order to attach or connect functional parts or components, they shall require at least two simultaneous actions for their release or opening in order to prevent unintended opening. Where one of the two sequences of buckle opening relies on pressure, it shall be necessary to apply a force of at least 50 N on this release mechanism.</p>		N/A
6	Material requirements and test methods		P
6.1	<p>General Requirements</p> <p>All materials used in floating leisure articles shall be visually clean and free from contamination. They shall be selected by the manufacturer according to the stresses that are resulting from the intended service conditions and the requirements set out for shape, dimension, maximum load, etc. The use under normal conditions shall not materially impair their performance and they shall meet all the requirements specified in Clause 6 and Clause 7. To avoid rotting, all fibre materials shall not be made from natural fibres like cotton.</p>		P
6.2	<p>Chemical requirements for materials making up the hull, unsupported or reinforced</p> <p>General</p> <p>In house or outside test confirmation may be allowed to verify compliance.</p>		P
6.3	Physical requirements		N
6.3.1	Resistance to cold		N
6.3.2	Resistance to heat		N
6.4	<p>Mechanical requirements of unsupported hull materials</p> <p>General</p> <p>Unless otherwise specified, the standard environmental conditions for the tests shall be a temperature of $(20 \pm 2) ^\circ\text{C}$ and a relative humidity of $(65 \pm 5) \%$.</p>		N

6.5	Mechanical requirements for reinforced hull materials General Specific requirements according to ISO 25649-3 to ISO 25649-7 apply		N
6.6	Other materials		N
6.6.1	Wood		N
6.6.2	Metal and synthetic material parts		N
6.7	Threads Requirements To sew load bearing components, only threads manufactured from synthetic materials whose properties correspond to polyester or polyamide fibres shall be used.		N
7	Durability of warnings and markings		P
7.1	Resistance to perspiration		P
7.2	Resistance to chlorinated salt water		P
7.2.1	Colour fastness When tested in accordance with the test methods in 7.2.4 the change in colour of the warnings and markings shall be 3 or better on the grey scale according to EN 20105-A03.		P
7.2.2	Test liquid The chlorinated salt water is prepared by dissolving 30 g of sodium chloride (NaCl) in one litre of an aqueous solution of sodium hypochlorite (NaOCl) containing 50 mg of active chlorine at pH (7,5 ± 0,05). The sodium hypochlorite solution is prepared in accordance with ISO 105-E03:2010, 5.2. The solution shall always be prepared immediately prior to use, using grade 3 water as specified in ISO 3696:1995, Clause 3.		P
7.2.3	Apparatus A suitable apparatus for the conditioning procedure should consist of a glass or stainless steel container that is big enough to hold the necessary volume of chlorinated salt water for a liquor ratio of 100:1 and a motor driven stirrer rotating at a frequency of 40 min ⁻¹ . In order to maintain the whole arrangement at room temperature, the procedure should be undertaken in a climate controlled room. Refer to ISO atmosphere according to ISO 554:1976, 2.1 (designation 20/65)		P

7.2.4	<p>Test method</p> <p>Material samples showing the warnings/markings shall be submerged in agitated chlorinated salt water for 12 h, in darkness and at room temperature (20 ± 2) °C. Ensure that the test samples are thoroughly wetted. After removal from chlorinated salt water, the samples shall be rinsed in distilled water and dried by hanging in air at room temperature.</p>		N
7.3	Adhesion of markings		P
7.4	<p>Provision of repair means</p> <p>Each floating leisure article shall be supplied with a repair kit, together with instructions for use, suitable for repairing small punctures of limited extent.</p>		P

EUT PHOTOGRAPHS

EUT Photo 1



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