

Test Report

Number: SZHH01477557

Applicant: YIWU ZHONGKU SAFEGUARD TECHNOLOGY
1ST FLOOR, BUILDING 4. NO.28 XIAOQIAO ROAD,
CHI'AN TOWN, INDUSTRIAL DISTRICT,
YIWU CITY, 322003,ZHEJIANG, CHINA

Date: Jan 28, 2021

Attn: Mr.Dong

Sample Description:

Four (4) pieces of submitted sample said to be :
Item Name : **Bike Helmet.**
Item/Model No. : **ZN-001.**
Helmet Size : 58-60 cm.
Country of Origin : China.
Country of Destination : EU.
Date Sample Received : Jul 02, 2020 & Dec 21, 2020.
Testing Period : Jul 02, 2020 ~ Jan 28, 2021.



Tests conducted:

As requested by the applicant, refer to attached page(s) for details.





中国认可
国际互认
检测
TESTING
CNAS L0327

Test Report

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Conclusion:

Tested sample
Submitted helmets

Standard
EN 1078:2012+A1:2012 Standard Specification for
Helmets Worn by Users of Pedal Cycles, Skateboards
and Roller Skates

Result
Pass

Authorized by:
For Intertek Testing Services
Shenzhen Ltd.



Andy, Fu Bo
Title: Supervisor
CNAS Approved Signatory





Test Report

Number: SZHH01477557

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1 Standard Specification for Helmets Worn by Users of Pedal Cycles, Skateboards and Roller Skates

As per EN 1078:2012+A1:2012: standard specification for helmets worn by uses of pedal cycles, skateboards and roller skates.

Number of samples tested: Four (4) sets.

Helmets size: 58-60cm

Test headform: M

Clause	Test Items	Result
4.1	Materials For those parts of the helmet coming into contact with the skin, the material used should be known not to undergo appreciable alteration from contact with sweat or with substances likely to be found in toiletries. Materials shall not be used which are known to cause skin disorders.	
4.2	Construction The helmet normally consists of a means of absorbing impact energy and means of retaining the helmet on the head in an accident. The helmet should be durable and withstand handling. The helmet shall be so designed and shaped that parts of it (visor, rivets, ventilators, edges, fastening device and the like) are not likely to injure the user in normal use. NOTE Helmets should: - have low weight; - be ventilating; - be easy to put on and take off; - be usable with spectacles; - not significantly interfere with the ability of the user to hear traffic noise.	P
4.3	Field of vision When tested in accordance with 5.7 there shall be no occultation in the field of vision bounded by angles as follows (see Figure 1 in EN 1078:2012+A1:2012): -horizontally: min. 105° from the longitudinal vertical median plane to the left and right hand sides; -upwards: min. 25° from the reference plane; -downwards: min. 45° from the basic plane.	P (Horizontally: >105° Upwards: >25° Downwards >45°)





Test Report

Number: SZHH01477557

Tests Conducted

Clause	Test Items	Result
4.4	Shock absorbing capacity The helmet shall give protection to the forehead, rear, sides, temples and crown of the head. When tested in accordance with 5.3 and 5.4 the peak acceleration shall not, for each impact, exceed 250 g for the velocity of 5,42 (+0.1, 0), m/s on the flat anvil, and 4,57 (+0.1, 0)m/s on the kerbstone anvil. NOTE These are theoretically equivalent to 1 497 mm and 1 064 mm drop heights respectively.	P (See appendix)
4.5	Durability After being tested the helmet shall not exhibit damage that could cause significant injury to the wearer (sharp edges, points).	P (No damage & significant injury)
4.6	Retention system	
4.6.1	General Means shall be provided for retaining the helmet on the wearer's head. All parts of the retention system shall be securely attached to the helmet.	P
4.6.2	Chin strap The chin strap shall not include a chin cup. Any chin strap shall be no less than 15 mm wide (W). Chin straps may be fitted with means of enhancing comfort for the wearer.	P (W: 16.0mm)
4.6.3	Fastening device Any retention system shall be fitted with a device to adjust and maintain tension in the system. The device shall be capable of adjustment so that the buckle does not sit on the jaw bone.	P
4.6.4	Colour No part of the retention system shall be coloured green. NOTE It is recommended that the opening mechanism be marked with red or orange colour.	P (Black)
4.6.5	Strength When tested in accordance with 5.5, the dynamic extension of the retention system shall not exceed 35 mm and the residual extension shall not exceed 25 mm. For this purpose, extension includes slippage of the fastening device. Damage to the retention system shall be accepted provided that the above requirements are met. NOTE In this test, slippage of the fastening device can be measured and recorded separately from other contributions to the extension but this is for information only and is not subject to a separate requirement.	P (See appendix)





Test Report

Number: SZHH01477557

Tests Conducted

Clause	Test Items	Result
4.6.6	Effectiveness When tested in accordance with 5.6 the helmet shall not come off the headform.	P (Did not come off)
4.6.7	Ease of release Following the strength test in accordance with 5.5 and with the load still applied, it shall be possible to open the release system with one hand.	P
5.2	Inspection and determination of mass Inspect the helmet to ascertain whether it is suitable for its intended purpose and fulfils the general requirements in 4.2. Determine the mass of the helmets of the same size submitted for testing. Calculate and record the mean value in g rounded off to the nearest 10 g, stating the size of the helmet.	P (See appendix)
6	Marking Each helmet shall be marked in such a way that the following information is easily legible by the user and is likely to remain legible throughout the life of the helmet: a) number of this European Standard; b) name or trademark of the manufacturer; c) designation of the model; d) designation, which shall be one or more of the following: Helmet for pedal cyclists, skateboarders or roller skaters; e) size or size range of the helmet, quoted as the circumference (in centimeters) of the head which the helmet is intended to fit; f) weight of the helmet (the average mass in grams determined according to 5.2); g) year and quarter of manufacture; h) following text: "Warning! This helmet should not be used by children while climbing or doing other activities when there is a risk of strangulation/hanging if the child gets trapped with the helmet." In addition, if the helmet has components made of material which are known to be adversely affected by contact with hydrocarbons, cleaning fluids, paints, transfers or other extraneous additions, the helmet shall carry an appropriate warning.	P
	If there is a consumer sales packaging, the information specified in a), b), d) and h) shall also be given on that package. The text shall be of minimum font size 12.	P





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Clause	Test Items	Result
7	<p>Information supplied by the manufacturer With every helmet, clear information in the language of the country of sale shall be given as follows:</p> <ul style="list-style-type: none"> a) that the helmet can only protect if it fits well and that the buyer should try different sizes and choose the size which feels secure and comfortable on the head; b) that the helmet should be adjusted to fit the user, e.g. the straps positioned so that they do not cover the ears, the buckle positioned away from the jawbone and the straps and buckle adjusted to be both comfortable and firm; c) how the helmet should be positioned on the head to ensure the intended protection is provided (e.g. hat it should be placed so as to protect the forehead and not be pushed too far over the back of the head); d) that a helmet cannot always protect against injury; e) that a helmet subjected to a severe impact should be discarded and destroyed; f) a statement of the danger of modifying or removing any of the original component parts of the helmet other than as recommended by the manufacturer, and that helmets should not be adapted for the purpose of fitting accessories in a way not recommended by the manufacturer. 	P

Abbreviation : P = Pass

Appendix:

Section 5.2 – Inspection and determination of mass

Sample No.	Mass (g)
1	312.2
2	310.3
3	311.0
4	310.7
Average(rounded off to nearest 10g)	311.1(310)



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Section 4.4—Shock absorbing capacity
Ambient temperature at time of test: 22.5°C

Sample No.	Environment Impact	Test anvil	Location Impact	Velocity (m/s)	Peak (Gn)	Compliant
1	High	Kerbstone	Left	4.59	124.5	Pass
		Flat	Rear	5.45	146.7	Pass
2	Low	Flat	Front	5.46	167.4	Pass
		Kerbstone	Rear	4.60	94.4	Pass
3	Artificial ageing	Kerbstone	Rear	4.62	111.2	Pass
		Flat	Right	5.44	186.8	Pass

Section 4.6.5—Retention system strength

Sample No.	Dynamic extension (mm)	Residual extension (mm)	Compliant
2	9.2	8.8	Pass
3	8.7	8.3	Pass

Photos for reference:



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Tests Conducted

Side view	
Back view	



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Label	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>ZN-001 Use: Pedal cyclists - Roller Skaters - Helmet for pedal cyclists, skateboarders or roller skaters Size: L (58-60 cm) Weight: 310g Date of manufacture: 2021.01</p> </div> <div style="text-align: right; margin-bottom: 10px;">  DIN <hr style="width: 50px; margin: 0 auto;"/> EN 1078 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Yiwu Zhongku Security Technology Co., Ltd. NO. NO.28 Xiaoqiao Road Chian town Yiwu City, Zhejiang Province,China</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Warning! This helmet mustn't be used for motor cyclists. This helmet can be used for cyclists, skateboard-drivers and roller-skaters only. This helmet should not be used by children while climbing or doing other activities when there is a risk of strangulation/hanging if the child gets trapped with the helmet. Make no modification. The shell is hand washable with gentle soap and warm water. Morys leport limited</p> </div> <div style="border: 1px solid black; padding: 5px;">  </div>
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Tests Conducted

<p>Package</p>	
<p>Instruction</p>	



Test Report

Number: SZHH01477557

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<p>Test line</p>	

Test Report

Number: SZHH01477557

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Impact sites #1	
Impact sites #2	

End of report

The statements of conformity reported have considered the decision rule agreed, namely that Intertek have taken account of measurement uncertainty as calculated by Intertek, and applied according to ILAC-G8/09:2019 (Non-binary acceptance based on guard band $w = U$) except designation from the customer, regulation or test specification.

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