

Test Report

Number: SZHH01976925

Applicant: MID OCEAN BRANDS B.V.
7/F, KINGS TOWER, 111 KING LAM STREET,
CHEUNG SHA WAN, KOWLOON, HONG KONG

Date: Nov 23, 2024

Attn: DEREK HUI

Sample Description:

Thirteen (13) pieces of submitted sample said to be :

Item Name	: Safety Helmet
Item/Model No.	: MO2456
Material for Helmet	: Shell - ABS
Helmet size	: 51-63cm
Factory Name	: 118518
Country of Origin	: China
Country of Destination	: EU
Date Sample Received	: Sep 24, 2024
Testing Period	: Sep 24, 2024 ~ Nov 22, 2024



Tests conducted:

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



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Conclusion:

Tested sample
Submitted helmets

Standard
EN 397: 2012+A1: 2012 Standard specification for industrial safety helmets.

Result
Pass

Authorized by:
For Intertek Testing Services
Shenzhen Ltd.

Andy Fu



Andy, Fu Bo
Title: Manager
CNAS Approved Signatory



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1 Standard Specification for Industrial safety helmets

As per EN 397: 2012+A1: 2012 Standard specification for industrial safety helmets.

Number of samples tested: Eight (8) sets.

Helmets size: 51-63cm

Test headform: 525 / 555 / 585

Clause	Test Items	Result
4	Physical requirements	
4.1	Materials and construction	
	The helmet shall include at least a shell and a harness.	P
	Recommendations for materials and construction of helmets are given in Annex A. For those parts of the helmet that come into contact with the skin, materials which are known to be likely to cause skin irritation or any adverse effect on health shall not be used.	
	There shall be no sharp edge, roughness or projection on any part of the helmet, its accessories or attachment devices, which are in contact, or potential contact, with the wearer, when the helmet is worn, such as is likely to cause injury to the wearer.	P
	Any part of the helmet which can be adjusted, or removed by the wearer for the purpose of replacement, shall be so designed and manufactured as to facilitate adjustment, removal and attachment without the use of tools.	P
	Any adjustment system incorporated within the helmet shall be so designed and manufactured as not to become incorrectly adjusted without the wearer's knowledge under the foreseeable conditions of use.	P
4.2	External vertical distance When measured under the conditions given in 6.5 the external vertical distance shall be no more than 80 mm.	P (See appendix)
4.3	Internal vertical distance When measured under the conditions given in 6.5 the internal vertical distance shall be no more than 50 mm.	P (See appendix)
4.4	Internal vertical clearance When measured under the conditions given in 6.5 the internal vertical clearance shall be no less than 25 mm. See Figure 3.	P (See appendix)
4.5	Horizontal distance When measured under the conditions given in 6.5 the horizontal distance at the front and sides of the helmet shall be no less than 5 mm.	P (See appendix)
4.6	Wearing height Provision shall be made for the wearing height to be adjustable. When measured under the conditions given in 6.5 the wearing height at the front or sides of the helmet shall be no less than: 80 mm for helmets mounted on headform size designation 525 (equivalent to code D, EN 960:1994); 85 mm for helmets mounted on headform size designation 555 (equivalent to code G, EN 960:1994); 90 mm for helmets mounted on headform size designation 585 (equivalent to code K, EN 960:1994).	P (See appendix)
4.7	Harness A harness shall include a headband and nape strap.	P



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Clause	Test Items	Result
4.7.1	Headband/nape strap The length of the headband or the nape strap shall be adjustable in increments of no more than 5 mm.	P (See appendix)
4.7.2	Cradle If the cradle incorporates textile tapes, their individual widths shall be no less than 15 mm, and the total of the widths of the tapes radiating from their intersection shall be no less than 72 mm.	P (See appendix)
4.7.3	Comfort band or sweatband If provided, a sweatband shall cover the inner front surface of the headband for a length of no less than 100 mm each side of the centre of the forehead. The length shall be measured with a flexible measure along a line 10 mm $\pm$ 1 mm above the lower edge of the headband. The sweatband shall have a width not less than that of the headband over the length which it covers.	P (See appendix)
4.8	Chin strap Either the helmet shell or the headband shall be fitted with a chin strap or with means of attaching one. Any chin strap supplied with the helmet shall be no less than 10 mm wide when un-tensioned and shall be attached either to the shell or to the headband.	P (W:16.0 mm)
4.9	Ventilation If the helmet shell is provided with holes for ventilation purposes, the total area of such holes shall be no less than 150 mm ² and not more than 450 mm ² .	P (240 mm ²)
4.10	Accessories For the fixing of helmet accessories, specified in the information accompanying the helmet, in accordance with 7.2.3, the required fixing devices, or appropriate holes in the helmet shell, shall be provided by the helmet manufacturer.	NA
5	Performance requirements	
5.1	Mandatory requirements	
5.1.1	Shock absorption When a helmet is tested by the method given in 6.6, the force transmitted to the headform shall not exceed 5.0 kN. This requirement shall be satisfied by helmets treated in accordance with the appropriate conditioning processes given in 6.2, as specified by the list of mandatory tests given in 6.1.	P (See appendix)
5.1.2	Resistance to penetration When a helmet is tested by the method given in 6.7, the point of the striker shall not contact the surface of the headform. This requirement shall be satisfied by helmets treated in accordance with the appropriate conditioning processes given in 6.2, as specified by the list of mandatory tests given in 6.1.	P (See appendix)
5.1.3	Flame resistance When tested by the method given in 6.8, the materials of the shell shall not burn with the emission of flame after a period of 5 s has elapsed after removal of the flame.	P
5.1.4	Chin strap anchorages When tested in accordance with 6.9, the artificial jaw shall be released at a force of no less than 150 N and no more than 250 N, due to failure only of the anchorage(s).	P (See appendix)
5.1.5	Label The label which may be attached to the helmet in accordance with 7.2.2 shall remain attached and legible on each sample helmet, following the appropriate conditioning in accordance with 6.2.3, 6.2.4, 6.2.5 or 6.2.6.	P
5.2	Optional requirements	
5.2.1	Very low temperature (– 20 °C or – 30 °C) When tested for shock absorption by the method given in 6.6, the requirement	NA



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Clause	Test Items	Result
	of 5.1.1 shall be satisfied by one helmet which has been conditioned in accordance with 6.2.7. When tested for resistance to penetration by the method given in 6.7, the requirement of 5.1.2 shall be satisfied by a second helmet, which has been conditioned in accordance with 6.2.7. Helmets claimed to meet this requirement shall state this fact on the label attached to the helmet, in accordance with 7.2.2.	
5.2.2	Very high temperature (+ 150 °C) When tested for shock absorption by the method given in 6.6, the requirement of 5.1.1 shall be satisfied by one helmet, which has been conditioned in accordance with 6.2.8. When tested for resistance to penetration by the method given in 6.7, the requirement of 5.1.2 shall be satisfied by a second helmet, which has been conditioned in accordance with 6.2.8. Helmets claimed to meet this requirement shall state this fact on the label attached to the helmet, in accordance with 7.2.2.	NA
5.2.3	Electrical properties When tested by all three of the methods given in 6.10, the leakage current shall not exceed 1,2 mA. Helmets claimed to meet this requirement (for all 3 tests) shall state this fact on the label attached to the helmet, in accordance with 7.2.2.	NA
5.2.4	Lateral deformation When tested by the method given in 6.11, the maximum lateral deformation of the helmet shall not exceed 40 mm, and the residual lateral deformation shall not exceed 15 mm. Helmets claimed to meet this requirement shall state this fact on the label attached to the helmet, in accordance with 7.2.2.	NA
5.2.5	Molten metal splash When tested by the method given in 6.12, the helmet shell shall not: a) be penetrated by the molten metal; b) show any deformation, measured at right angles to the base plane of the helmet, greater than 10 mm; c) burn with the emission of flame after a period of 5 s has elapsed after the pouring of molten metal has ceased. Helmets claimed to meet this requirement shall state this fact on the label attached to the helmet, in accordance with 7.2.2.	NA
7	Marking	
7.1	Markings on the helmet Every helmet claimed to comply with the requirements of this European Standard shall carry moulded or impressed marking giving the following information: a) number of this European Standard; b) name or identification mark of the manufacturer; c) year and quarter of manufacture; d) type of helmet (manufacturer's designation). This shall be marked on both the shell and the harness; e) size or size range (in centimetres). This shall be marked on both the shell and the harness. f) abbreviation for the material of the shell shall be in accordance with EN ISO 472. (For example, ABS, PC, HDPE, etc.)	P
7.2	Additional information	



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Clause	Test Items	Result
	7.2.1 A label shall be attached to each helmet giving the following information, provided precisely and comprehensively in the language of the country of sale: "For adequate protection this helmet must fit or be adjusted to the size of the user's head. The helmet is made to absorb the energy of a blow by partial destruction or damage to the shell and the harness, and even though such damage may not be readily apparent, any helmet subjected to severe impact should be replaced. The attention of users is also drawn to the danger of modifying or removing any of the original component parts of the helmet, other than as recommended by the helmet manufacturer. Helmets should not be adapted for the purpose of fitting attachments in any way not recommended by the helmet manufacturer. Do not apply paint, solvents, adhesives or self-adhesive labels, except in accordance with instructions from the helmet manufacturer."	P
	7.2.2 Each helmet shall carry moulded or impressed marking or shall carry a durable self-adhesive label stating the optional requirements complied with, as follows: Optional requirement Marking/Label Very low temperature – 20 °C or – 30 °C as appropriate Very high temperature + 150 °C Electrical insulation 440 V a.c. Lateral deformation LD Molten metal splash MM	NA
	7.2.3 The following information, provided precisely and comprehensively in the official language(s) of the country of sale, shall accompany each helmet: a) the name and address of the manufacturer; b) instructions or recommendations regarding adjustment, fitting, use, cleaning, disinfection, maintenance, servicing and storage. Substances recommended for cleaning, maintenance or disinfection shall have no adverse effect on the helmet and shall not be known to be likely to have any adverse effect upon the wearer, when applied in accordance with the manufacturer's instructions; c) details of suitable accessories and appropriate spare parts; d) the significance of the optional requirements complied with and given in accordance with 7.2.2, and guidance regarding the limits of use of the helmet, corresponding to the respective risks; e) guidance regarding the obsolescence deadline or period of obsolescence of the helmet and its component parts; f) guidance regarding details of the type of packaging suitable for transportation of the helmet.	P

Abbreviation: P = Pass; NA = Not Applicable



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Appendix:

Section 4.2– External vertical distance

Sample No.	External vertical distance(mm)		Compliant
	Headform:525	Headform:585	
1	45	47	Pass

Section 4.3– Internal vertical distance

Sample No.	Internal vertical distance(mm)		Compliant
	Headform:525	Headform:585	
1	28	26	Pass

Section 4.4– Internal vertical clearance

Sample No.	Internal vertical clearance(mm)		Compliant
	Headform:525	Headform:585	
1	27	28	Pass

Section 4.5– Horizontal distance

Sample No.	Horizontal distance (mm)				Compliant
	Headform:525		Headform:585		
	Front	Sides	Front	Sides	
1	12	14	15	17	Pass

Section 4.6– Wearing height

Sample No.	Wearing height (mm)				Compliant
	Headform:525		Headform:585		
	Front	Sides	Front	Sides	
1	84	88	95	91	Pass

Section 4.7.1– Headband / nape strap

The headband was adjustable in increments as follows:

Sample No.	Increment(mm)	Compliant
1	3.1	Pass

Section 4.7.2– Cradle

Sample No.	Individual Width(mm)	Total Width(mm)	Compliant
1	25	120	Pass

Section 4.7.3– Comfort band or sweatband

Sample No.	Length from centre, each side(mm)	Compliant
1	123	Pass
	123	Pass



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Section 5.1.1–Shock absorbing capacity

Ambient temperature at time of test: 22.1°C

Sample No.	Environment Impact	Location Impact	Impact height (mm)	Maximum force transmitted (kN)	Compliant
1	Low	Top	1000	4.37	Pass
2	Water		1000	4.11	Pass
3	High		1000	4.02	Pass
4	Artificial ageing		1000	3.33	Pass

Section 5.1.2–Retention to penetration

Sample No.	Environment Impact	Location Impact	Impact height (mm)	Striker contact headform or not	Compliant
5	Low	Top (Radius 50mm)	1000	No	Pass
6	Water		1000	No	Pass
7	High		1000	No	Pass
8	Artificial ageing		1000	No	Pass

Section 5.1.4– Chin strap anchorages

Sample No.	Environment Impact	Force to release jaw(N)	Compliant
7	High	209	Pass

Photos for reference



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Top view	
Bottom view	

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Label	EN397 : 2012+A1:2012 Manufactured by: Mid Ocean Brands B.V. PO BOX 644, 6710 BP (NL) MO2456 Size: 51-63cm Material: ABS Made in China
	PO: 41-114967 CAUTION: For adequate protection this helmet must fit or be adjusted to the size of the user's head. The helmet is made to absorb the energy of a blow by partial destruction or damage to the shell and the harness, and even though such damage may not be readily apparent, any helmet subjected to severe impact should be replaced. The attention of users is also drawn to the danger of modifying or removing any of the original component parts of the helmet, other than as recommended by the helmet manufacturer. Helmets should not be adapted for the purpose of fitting attachments in any way not recommended by the helmet manufacturer. Do not apply paint, solvents, adhesives or self-adhesive labels, except in accordance with instructions from the helmet manufacturer.

MO2456
Size: 51-63cm





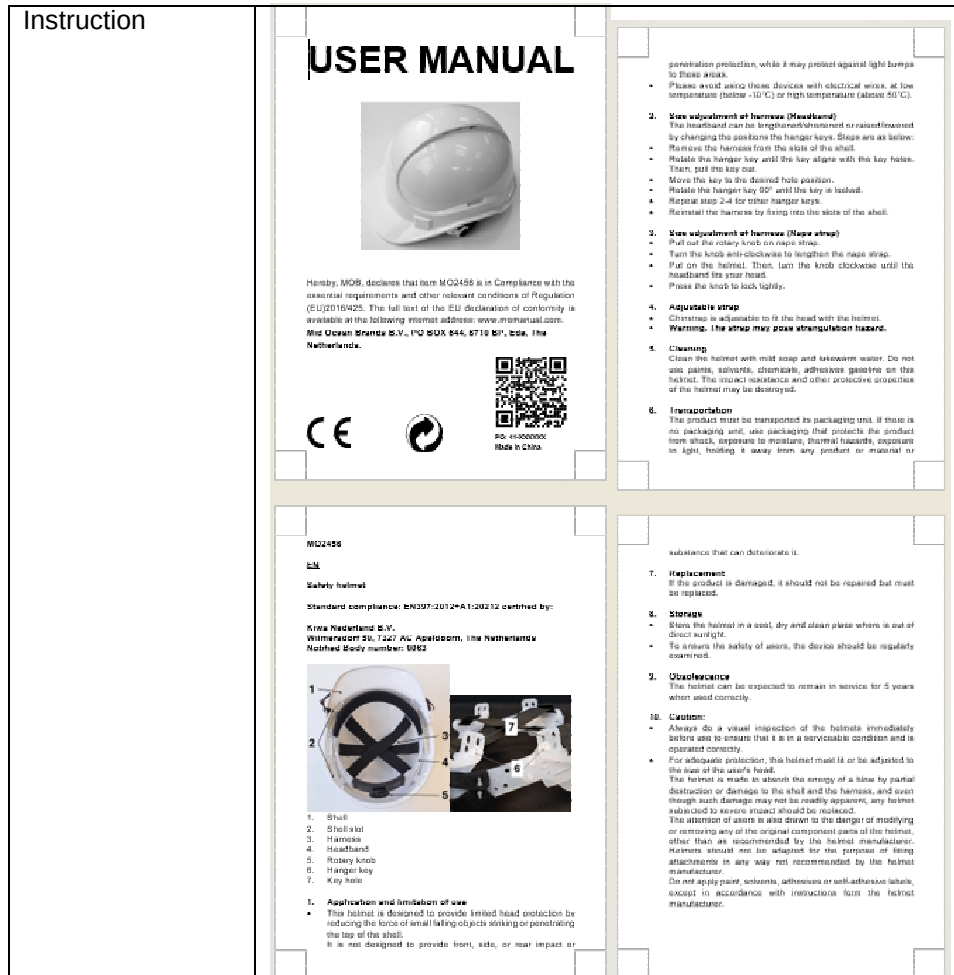
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End of report

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. This decision rule only applies to the numeric test results. Full details of our agreed decision rules and the associated risk can be viewed: <https://www.intertek.com.cn/diypage/upload/SZ-AP15-HLS-QA.pdf>.

The sample(s) and sample information hereto are provided by the client who shall be solely responsible for the authenticity and integrity thereof. The results shown in this report relate only to the sample(s) received and tested. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct. This report shall not be reproduced unless with prior written approval from Intertek.



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EU type-examination certificate (Module B) 242310334/AA/00

Issued 18 December 2024

Date of expiration of validity 18 December 2029

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This certificate has THREE Annexes

In compliance with the procedure specified in the **Personal Protective Equipment Scheme** RD_111, Kiwa Nederland B.V. declares as designated Notified Body with number 0063, that the stated products, evaluated according Annex 1 of this certificate, comply with the applicable essential health and safety requirements of the Personal Protective Equipment Regulation (EU) 2016/425, based on the applicable technical standards and specifications as listed in Annex 2 of this certificate.

Product description:
Trademark:
Type designation:
Size:

Safety helmet
MOB
MO2456
51-63cm

Manufacturer:
Address:
City:
Country:

Mid Ocean Brands B.V.
PO BOX 644
6710 BP Ede
The Netherlands

This certificate is granted to:

Name:
Address:
City:
Country:

Mid Ocean Brands B.V.
PO BOX 644
6710 BP Ede
The Netherlands

Ron Scheepers
Managing director

Kiwa Nederland B.V.
Wilmersdorf 50
Postbus 137
7300 AC Apeldoorn
The Netherlands

[https://www.kiwa.com/nl/en/markets/
radio-wireless-and-electrical-
equipment/](https://www.kiwa.com/nl/en/markets/radio-wireless-and-electrical-equipment/)

Chamber of commerce
08090048



General Requirements

- There is a presumption of conformity with respect to the requirements of the Personal Protective Equipment Regulation, when all applicable harmonized standards listed in the Official Journal of the EU are being applied.
- This EU Type-examination certificate is limited to the Personal Protective Equipment Regulation.
- This EU Type-examination certificate is part of the Conformity Assessment procedure Module B and C, as described in Personal Protective Equipment Regulation.
- The validity of this EU Type-examination certificate is limited to products, which are equal to the one(s) assessed for this EU Type-examination.
- When the manufacturer (or holder of this EU-type examination certificate) is placing the listed products on the European market or the countries of the EEA, he is obliged to label the products with the prescribed CE logo. The CE logo stands for conformity to all applicable Directives and Regulations.
Next to the CE logo the manufacturer has to draw up and issue a Declaration of Conformity, declaring that the product(s) described in this EU Type-examination certificate, are in compliance with Regulation (EU) 2016/425 and any other applicable EU harmonization legislation.
- Each product shall be identified by means of type, batch and/or serial numbers and the name of the manufacturer and/or importer.
- If the equipment is to be modified, Kiwa shall be notified immediately. Depending on the modifications, Kiwa may have additional examinations carried out in consultation with the applicant.
- In case any referenced standard in this EU-type examination certificate is withdrawn or superseded and the presumption of conformity with the essential requirements has ceased, investigation by Kiwa is needed to determine the validity of this EU-type examination.
- For category III PPE, this certificate shall only be used in conjunction with one of the conformity assessment procedures referred to in point (c) of Article 19 of the Personal Protective Equipment Regulation.

Remarks and observations

The following conditions are applicable:

None

Documentation lodged for this EU Type-examination

Test Reports:

- InterTek Testing Services Shenzhen Ltd.: SZHH01976925, 23 November 2024
- InterTek Testing Services Shenzhen Ltd.: SZHH01982800, 24 October 2024

Product Documentation:

- Assembly drawings
- Internal photos
- External photos
- Manual
- Technical description or data sheets
- Label and label placement
- Risk assessment
- MO2456_Guarantee Letter-DOC upload to website_20241213

Technical Standards and Specifications

The following standards have been used in full or part to cover the essential requirements:

EN 397:2012+A1

October, 2012

Technical features and characteristics

The product includes the following features and characteristics:

Not specified

The product as described in this EU Type-examination includes the following type designations:

- | | |
|------------------------|---------------|
| - Product description: | Safety helmet |
| - Trademark: | MOB |
| - Type designation: | MO2456 |
| - Size: | 51-63cm |