



Certificate no.:
TALB000004J

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Food ration**

with type designation(s)

Food ration for survival crafts Model: HXKL-88

issued to

Shanghai Martian Ship Equipment Co., Ltd.
Shanghai, China

is found to comply with

**SOLAS Ch. III, Regulation 4 and 34, IMO Res. MSC.48(66), Life-saving Appliances Code, Chapter IV,
Paragraph 4.1.5.1.18 and 4.4.8.12**

Application:

Food Ration

Issued at **Høvik** on **2024-05-06**

This Certificate is valid until **2029-05-05**.

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Timo Linn**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2023-09

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Product description

"Food ration for survival crafts Model: HXKL-88"

The ration consists of 8 bars of compressed biscuit, each bar wrapped in grease-proof paper. The 8 bars are sealed in a polythene bag, which in turn is enclosed within a sealed shrink-wrapped foil laminate.

The energy value of the complete pack is at least 10.000 kJ and the net weight at least 500 g. Each pack is acceptable as a ration for one person.

The packages are easy to open, also with immersion suit gloved hands.

The shelf life for the ration is 5 ½ years. The food ration shall be replaced not later than five and a half years from the date of production or according to local regulations.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Test report No. SHA03-24013051-CS-01CnEnR1 dated 07 February 2024 from WEIPU, Yangpu District, Shanghai.

Test report No. SH2024002278 dated 23 January 2024 from WEIPU, Yangpu District, Shanghai.

Test report No. Analysis of Food ration dated 20 February 2024 from WEIPU, Yangpu District, Shanghai.

Tests carried out

Tests have been carried out according to ISO 18813:2022 §4.31.3.

Marking of product

The product is to be indelibly marked with the name and address of the manufacturer, type designation, production lot number, the quantity of food in the package, date of manufacture and expiry date and instructions for consumption.

Markings shall comply with LSA Code item 1.2.2.9, item 4.1.5.1.19 and 18813:2022 §5

Periodical assessment

DNV's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4.