



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TALB000000A**  
Revision No:  
**3**

## This is to certify:

**That the Inflatable liferafts**

with type designation(s)  
**SMLR-A-4(I)**

Issued to

**Shanghai Star Rubber Products Co., Ltd.**  
**Shanghai, China**

is found to comply with

**SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34. IMO Res. MSC 48(66) - Lifesaving Appliance Code.**  
**Tested to IMO Res. MSC 81(70)**

## Application :

**Not for use on board SOLAS ships. Carrying capacity is only 4 persons and does not fulfil LSA Code item 4.1.2.1 (minimum capacity 6 persons).**

**This certificate is recognized by Transport Canada.**

Issued at **Høvik** on **2021-04-26**

This Certificate is valid until **2026-04-25** .

DNV local unit: **Shanghai CMC**

Approval Engineer: **Tessa Biever**

for **DNV**

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**Mårten Schei-Nilsson**  
**Head of Section**

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.



## Product description

SMLR-A-4(I), inflatable liferaft:

Material	Type designation	Manufacturer
Buoyancy tube fabric	XB-21	Shanghai Star Rubber Products Co., Ltd.
Seam fabric	XB-03	Shanghai Star Rubber Products Co., Ltd.
Exterior canopy fabric	2x3-2PU	WuJiang Zhengyang Textile Co., Ltd.
Interior canopy fabric	190 T	WuJiang Zhengyang Textile Co., Ltd.
Insulated floor	XB-21	Shanghai Star Rubber Products Co., Ltd.

The design assessment is based on IMO Res. MSC.48(66) as amended including IMO Res. MSC.293(87) and Canadian Lifesaving Appliance Standard TP 14475E, Part I, Ch. IV §4.1, §4.2 and §4.4 and Life saving equipment regulations C.R.C.1436 Schedule VIII.

## Application/Limitation

Container No.	Capacity (persons@82.5 kg)	Weight of liferaft (SOLAS A-pack) [kg]	Required bollard pull [kN]		Maximum stowage height [m]
			2 knots	3 knots	
GRP/MQ-102-00 (780 x 530 x 350 mm)	4	82	0.40	0.55	18

- Not for use on board SOLAS ships. Carrying capacity is only 4 persons and does not fulfil LSA Code 4.1.2.1 (minimum capacity 6 persons).
- Gas cylinders shall be of an approved type.
- First aid kits shall comply with the minimum requirements of the Canadian Lifesaving Appliance Standard TP 14475E, Part I, Ch.VII, §7.5.1.
- Components in the gas inflation system should be approved according to ISO 15738:2019.
- The liferaft is intended to be installed with external weak link and a hydrostatic release unit. Float free arrangement to be checked upon installation on board.
- Production testing shall be carried out according to IMO Res. MSC 81(70) Part 2, as amended.

## Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, September 2018.

This certificate replaces TALB000000A Rev.2.

Basis for approval:

Title	Doc. No.	Date
<b>Drawings</b>		
General drawing of "SMLR-A-4(I)"	274MQ-239-00A	2014-05
Structure drawing of "SMLR-A-4(I)"	274MQ-239-01A	2014-05
The drawing of "SMLR-A(I)-4" Inflatable Liferaft Canopy	274MQ-239-02A	2014-05
The drawing of "SMLR-A-4(I)" Inflation Liferaft Floor	274MQ-239-03A	2014-05
Inflation System for "SMLR-A-4(I)"	278MQ-65-07	2014-06
GRP Container	GRP/MQ-102-00	2019-01
<b>Calculations</b>		
Window – ventilation calculation	278MQ-225-0	2013-06
Design Calculation Book	SMLR-A(I)/JCB-2014	2014-05-20
<b>Test reports</b>		
Prototype test report "SMLR-A-4(I)" witnessed by DNV GL	MCS/Circ.980/Add.1	2015-06-25
Material test report, Shanghai Monitoring and Inspection Center for Rubber Products Quality, Shanghai, China	Test report No. W(X)20140931	2014-08-15
Material test report, Shanghai Monitoring and Inspection Center for Rubber Products Quality, Shanghai, China	Test report No. W(X)2011-2095	2011-12-15
<b>Other</b>		
Operations instructions, edition 1.0	-	2014-02
Service manual, edition 3.0	-	2014-02
Liferaft Technical data	-	2014-05
Main material and logo manual (Transport Canada), edition 1.0	-	2015-09

### **Tests carried out**

Prototype tests and test reports in accordance with the Recommendation on Testing of Life-Saving Appliances, IMO Res. MSC 81(70) Part 1, including IMO Res. MSC 226(82), IMO Res. MSC 295(87) and MSC. 323(89), have been witnessed and evaluated and found to be in compliance.

Tested to the requirements given in the Canadian Lifesaving Appliance Standard TP 14475E, Part II, Ch.5, §5.1.2.

### **Marking of product**

The marking shall be according to LSA Code, item 1.2.2.9, 4.2.6 and 4.2.7 as amended by IMO Res. MSC 48(66) and marked with "NON-SOLAS".

All instructions and markings accompanying the liferafts, or printed directly on the liferafts, shall be in both English and French, as per "Procedures For Approval of Life-Saving Appliances and Fire Safety Systems, Equipment and Products" (TP14612E) §2.2.1.3.

### **Transport Canada Approval**

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV confirms that the product listed in this certificate is in accordance with Transport Canada's requirements.

### **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 DNVGL-CP-0338, Section 4.