

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Portable Tank**

with type designation(s)

20ft portable tank BG 71-13**20ft portable tank BG 72-15****20ft portable tank BG 73-15**

Issued to

JL Goslar GmbH**Goslar, Germany**

is found to comply with

International Convention for Safe Containers, 1972 (CSC)**ISO 1496, Part 3: Tank Containers for Liquids, Gases and Pressurized Dry Bulk****DNV 2.7-4 Freight Containers****International Maritime Dangerous Goods Code (IMDG)****European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)****Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID)****Application :****UN Portable Tank, Tank Instruction T22**

Type	Max. gross mass	Max. payload	Tank cap.	MAWP/test pr.	Eq. shell thk.
20ft portable tank BG 71-13	30480 kg	23630 kg	6250 L	6.6/10.0 bar	10 mm
20ft portable tank BG 72-15	30480 kg	23280 kg	8250 L	6.6/10.0 bar	10 mm
20ft portable tank BG 73-15	33000 kg	25800 kg	8800 L	6.6/10.0 bar	10 mm

Issued at **Høvik** on **2018-08-01**This Certificate is valid until **2023-07-31**.for **DNV GL**DNV GL local station: **Magdeburg**Approval Engineer: **Igor Antonijevic**

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Inger-Helene Hals
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.



Job Id: **262.1-028410-1**
Certificate No: **TAS00001D4**

Product description

	BG 71-13	BG 72-15	BG 73-15
Max. external dimensions (LxWxH)	6058 x 2438 x 2438 mm		
Tare Mass	6850 kg	7200 kg	7200 kg
ISO Designation	1C		
Size code	20		
Type code	K2		
Tank diameter	1300 mm	1500 mm	1500 mm
Actual thickness, shell/heads ¹⁾	10 or 11 or 12 mm		
Tank material	DIN EN 10028-3, P355NL1+P355NL2		
Pressure Vessel Code	EN 14025		

¹⁾the actual shell thickness and corresponding tare mass must be correctly marked on the data plate and specified in the container certificate.

Application/Limitation

Design approved according to IMDG Code, Edition 2016 Amdt. 38-16.

CSC/IMDG/ADR/RID Approval Ref No.: N-NV/595/03/18

Metallurgical design temperature for tank: -40°C to +60°C

Design temperature for framework: -20°C

Allowable stacking weight for 1,8g: 192000 kN

The cargo accepted for transport is BROMINE or BROMINE SOLUTION under UN number 1744.

DNV GL surveyor has to witness important production and test events and issue Form no. CTT101 "Tank Container Certificate" for each container. In addition to this freight container certificate has to be issued (Form no. CTC301).

Each tank should be subjected to a hydraulic pressure test to required test pressure.

Type Approval documentation

Tests carried out

Prototypes tested according to the requirements.

Marking of product

Each container to be marked with:

- Data plates for UN tanks according to Ch. 6.7.2.20 requirements in IMDG Code, ADR and RID.
Design approval number according to Application/Limitation above
- Data plate according to CSC requirements including Allowable stacking load of 192000 kg.
- External marking according to CSC, ISO, IMDG/ADR/RID requirements
- DNV GL decal for freight containers
-  mark to be hard stamped on frame
- Marking in accordance with other applicable codes

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform an assessment every 2nd year and before the expiry date of this certificate to verify that the type approval is complied with.

END OF CERTIFICATE