



## Test Certificate No. 9757.1/15-8

Date of test 31.8.2015  
Date of expiry 31.8.2018  
Number of pages 4 C/B

**Applicant** Atlantis Products Pvt. Ltd.  
1205-1210 GIDC Dholka, Ahmedabad, 382225 India

**Test pieces** *Flexible Intermediate Bulk Containers - SWL = 1250 kg, SF = 5:1*  
*Single trip FIBCs for non-dangerous goods acc. ISO 21898*

**Design** **Manufacturer's type designation** APPL-01

**Dimensions** Sample a : (90 cm x 90 cm) x 90 cm (lowest size)<sup>1)</sup> **Volume** 800 litres **Tare** 960 g  
Samples b + c: (90 cm x 90 cm) x 200 cm (highest size)<sup>1)</sup> **Volume** 1800 litres **Tare** 1700 g

**Body fabric** Polypropylene 130 g/m<sup>2</sup>, uncoated, white flat woven fabric layers, each with one yellow coloured tape<sup>2)</sup>

**Suspension** Four white PP-webbings (40 mm wide, 30 g/m), sewn into the vertical seams in a length of 40 cm / 65 cm (lowest size) resp. 90 cm / 130 cm (highest size)<sup>3)</sup>, anchorage lengths for intermediate sizes see page 4

**Details** Four vertical seams, two horizontal seams at the bottom (U-panel design) / overlock + chain stitching / fabric folded in all the seams / open top<sup>2)</sup> / no inliner / discharge spout d = 40 cm<sup>3)</sup> made of PP- fabric 80 g/m<sup>2</sup> + 20 g/m<sup>2</sup> coating, double seam

**Kind of tests** *Type Tests according ISO 21898*

**Tests a + b** Cyclic top lift tests plus final load to failure **Test c** Compression test

**Test conditions** Charging with plastic granules (filling height approx. 85 cm (lowest size) resp. 195 cm (highest size), load application with piston and pressure plate (d = 90 cm), rate of load application 70 kN/min.

**Cyclic load and load to failure** **Test a** After 30 cycles of load application to **P<sub>c</sub> = 20 kN (2040 kg)** no visible damages occurred in the test piece. The load has then been increased until failure. On reaching a load of **P<sub>b</sub> = 63,7 kN (6490 kg)** the fabric tore at a vertical seam.

**Test b** After 30 cycles of load application to **P<sub>c</sub> = 25 kN (2550 kg)** no visible damages occurred in the test piece. The load has then been increased until failure. On reaching a load of **P<sub>b</sub> = 75,0 kN (7640 kg)** a webbing tore at the top seam.

**Compression** **Test c** After six hours compression by **P<sub>k</sub> = 50 kN (5100 kg)** no visible damages occurred in the test piece.

**Test result** *A safe working load SWL = 1250 kg / SF = 5:1 is allowable.*

**Statement of conformity** The FIBCs tested comply with the requirements of ISO 21898.  
FIBCs of this design type are in a condition for safe operation.

**Notes**

<sup>\*)</sup> This certificate is restricted to FIBCs produced by Atlantis Products Pvt. Ltd.

<sup>1)</sup> This certificate covers all FIBCs with heights of between 90 cm and 200 cm

Test diagrams see page 2. Photos of the test pieces see page 3.

<sup>2)</sup> Raw material: Pure virgin polypropylene (statement of the manufacturer)

<sup>3)</sup> "Directions for use referring to this certificate" see page 4.

Two test pieces are kept in our store for three years. This certificate expires on 31.8.2018.

Competent Engineer

Ronald Clews



Head of Institute

Dr.-Ing. Kielbassa