Date of test	11.5.2020
Date of expiry	11.5.2023
Number of pages	4 B / B

This Certificate is only valid when printed in colour and complete with all 4 pages.

Test Certificate No. 11735.1/20-5

Applicant BulkPack Exports Ltd.
"507", "B" Block, 5th Floor, Corporate House, RNT Marg, Indore – 452 001 (M.P.), India

Test piece ***Flexible Intermediate Bulk Containers - SWL = 1000 kg, SF = 5:1***
Single trip FIBCs for non-dangerous goods acc. ISO 21898

Manufacturer's type designation N/A

Design

Dimensions Sample a : (80 cm x 80 cm) x 75 cm (lowest size) [1] **Volume** 550 litres **Tare** 810 g
Samples b + c: (80 cm x 80 cm) x 110 cm (highest size) [1] **Volume** 800 litres **Tare** 980 g

Body fabric Polypropylene 135 g/m², uncoated [2], white flat woven fabric layers, each with one orange, one blue and one green coloured tape

Suspension Four black/white PP-webbings (40 mm wide, 28 g/m), sewn into the vertical seams in a length of 40 cm / 70 cm

Details Four vertical seams, two horizontal seams at the bottom (U-panel design) / overlock + chain stitching / fabric folded in all the seams / open top [3] / no inliner / discharge spout d = 35 cm [3] made of PP- fabric 90 g/m² + 20 g/m² coating, double seam

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

Test conditions

Tests a + b Cyclic top lift tests acc. Annex B **Test c** Compression test acc. Annex C
Charging with plastic granules (filling height approx. 70 cm (lowest size) resp. 105 cm (highest size), load application with piston and pressure plate (d = 80 cm), rate of load application 70 kN/min.

Cyclic load and load to failure

Sample a After 30 cycles of load application to P_c = **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_b = **57,1 kN** (5820 kg) a webbing tore at the suspension frame.

Sample b After 30 cycles of load application to P_c = **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_b = **54,2 kN** (5520 kg) the fabric tore horizontally below the long leg of a webbing attachment.

Compression

Sample c After six hours compression by P_k = **40 kN** (4180 kg) no visible damages occurred in the test piece.

Test result ***A safe working load SWL = 1000 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

This Certificate is restricted to FIBCs produced by BulkPack Exports Ltd.
[1] **This certificate covers all FIBCs with heights of between 75 cm and 110 cm.**
All material weights are minimum weights and may not be lower than the values shown.
Test diagrams see page 2. Photos of the test pieces see page 3.
[2] Raw material: Pure virgin polypropylene (statement of the manufacturer)
[3] "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 11.5.2023.

Competent Engineer

i. V. Jörg

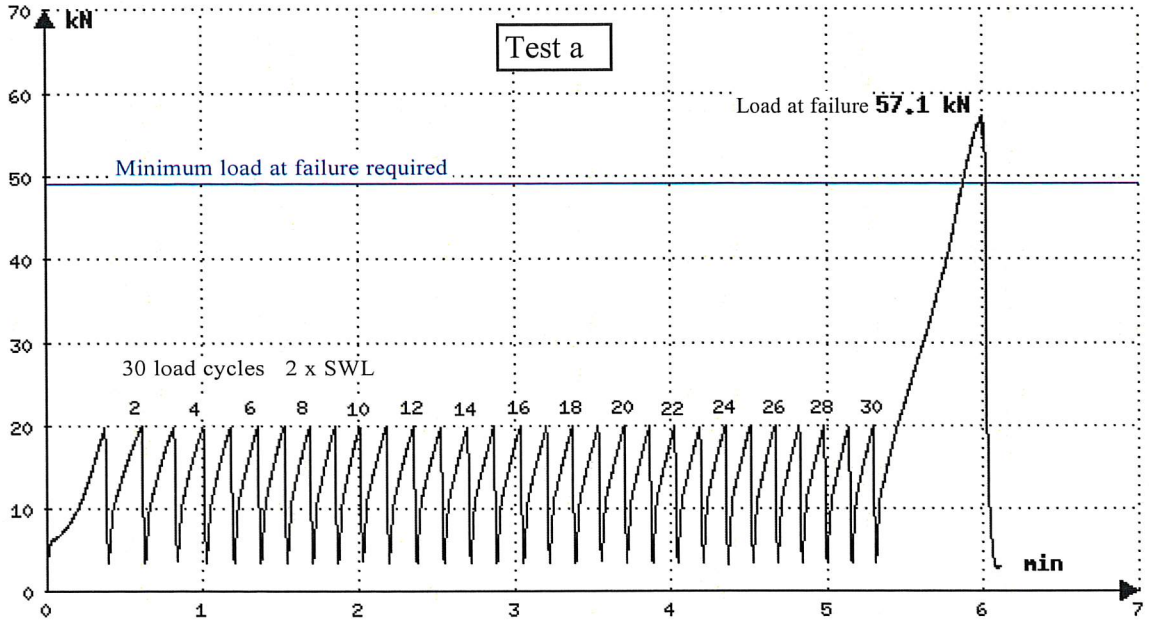
Jorg Bartel

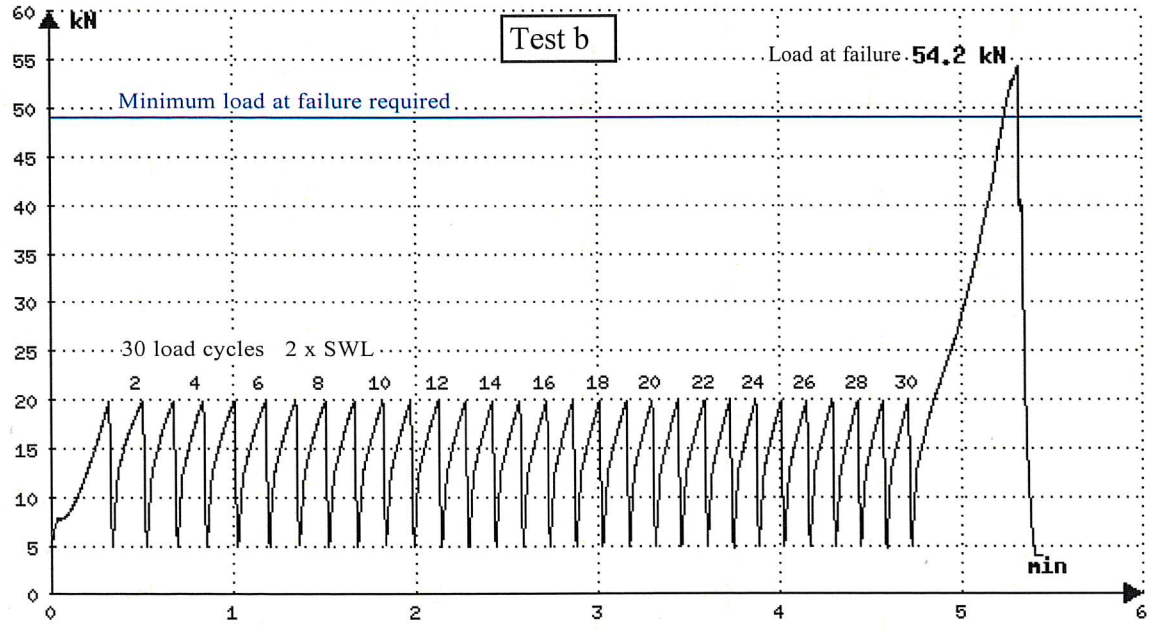
LABORDATA International Materials Testing Institute

Head of Institute

Dr. Herbert Kielbassa

FIBC - Cyclic top lift tests
Test diagrams 11735.1 a + b / 20 - 5





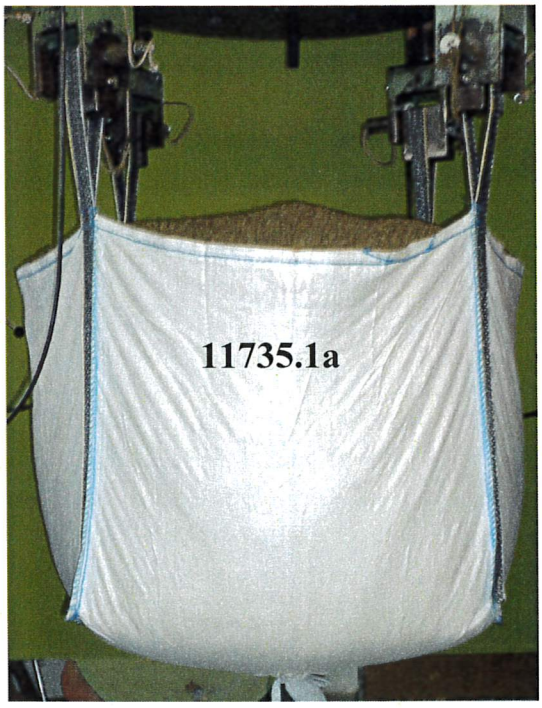
Project data

Applicant	: BulkPack Exports Limited.
Test piece a	: FIBC 80 cm x 80 cm x 75 cm
Test piece b	: FIBC 80 cm x 80 cm x 110 cm
Safe working load	: SWL = 1000 kg
Safety factor	: SF = 5 : 1

Test data

Test date	: 11.5.2020
Test Standard	: ISO 21898
Load at failure, test a	: Pb = 57,1 kN = 5820 kg
Load at failure, test b	: Pb = 54,2 kN = 5520 kg

FIBC - Cyclic top lift tests
Photos of the test samples



Project data

Applicant	: BulkPack Exports Limited.
Test piece a	: FIBC 80 cm x 80 cm x 75 cm
Test piece b	: FIBC 80 cm x 80 cm x 110 cm
Safe working load	: SWL = 1000 kg
Safety factor	: SF = 5 : 1

Test data

Test date	: 11.5.2020
Test Standard	: ISO 21898
Load at failure, test a	: Pb = 57,1 kN = 5820 kg
Load at failure, test b	: Pb = 54,2 kN = 5520 kg

Directions for use referring to this certificate

This certificate covers FIBCs of like design, manufactured using like materials and methods of construction as set down in this certificate and showing dimensions as listed below and in the certificate. The use of other methods or components may render the certificate unvalid. It is the responsibility of FIBC manufacturers to ensure the samples tested are representative of the production.

Allowed (covered by this certificate)	**Not allowed** (not covered by this certificate)
Diameters of discharge spout smaller than **35** cm	Diameters of discharge spout larger than **35** cm
Base without discharge spout	
Base dimensions of between **80** cm x **80** cm and **88** cm x **88** cm provided the same geometry is maintained	Base dimensions smaller than **80** cm x **80** cm Base dimensions larger than **88** cm x **88** cm
Bag heights of between **75** cm and **110** cm	Bag heights smaller than **75** cm Bag heights larger than 110 cm
Use for one filling and one discharge only	Re-use of the FIBCs
Open top or any other design of top construction	Manufacture after expiry date of this certificate: **11.5.2023**

Label

All FIBCs shall be durably marked by means of a permanently attached and easily visible and readable label. The layout of the label referring to this certificate shall be as shown below with the following data:

Manufacturer's Name & Address and Logo
Manufacturer's Reference (unique to the hereby certified FIBC type)

SWL 1000 kg **Safety Factor 5 : 1**

Your logos etc.	**Test Certificate No** 11735.1/20-5
	Test Certificate Date 11.5.2020
	Approved Laboratory LABORDATA
	Test Standard ISO 21898
	FIBC Class **Single trip**
	Date FIBC manufactured

Handling Recommendations / Pictograms (proposals see www.labordata.com)

Supplier's Name & Address (if required)