



Member of Q-InPaLab® Global Quality Association of Independent Packaging Laboratories Authorized Laboratory for Packagings and IBCs of Dangerous Goods. Authorized Third Party Inspectors

Date of test
Date of expiry
Number of pages

2.2.2021 2.2.2024 3 P/B

This Certificate is only valid when printed in colour and complete with all 3 pages.

Test Certificate No. 11969.1/21-2

**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 = 250 kg, SF = 5:1

Single trip FIBCs for non-dangerous goods acc. ISO 21898

Design

Manufacturer's type designation N/A Dimensions (90 cm x 90 cm) x 120 cm

Volume 1100 litres

Tare 810 g

**Body fabric** Polypropylene  $55 \text{ g/m}^2 + 20 \text{ g/m}^2 \text{ coating}$ , white fabric layers, each with one green, one orange

and one pink coloured tape 1)

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

of 25 cm / 50 cm

Details Four vertical seams, two horizontal seams at the bottom (U-panel design) / double chain

stitching / fabric folded in all the seams / open top <sup>2)</sup> / no inliner / no discharge spout <sup>2)</sup>

Kind of tests

Type Tests according to ISO 21898

Test a Cyclic top lift test acc. Annex B

Test b Compression test acc. Annex C

**Test conditions** 

Charging with plastic granules (filling height approx. 115 cm), load application with piston

and pressure plate (d = 90 cm), rate of load application 70 kN/min.

Cyclic load and load to failure

Sample a

After 30 cycles of load application to  $P_c = 5 \text{ kN}$  (510 kg) no visible damages occurred in the test piece. The load has then been increased until failure. When reaching a load of

 $P_b = 16.9 \text{ kN} (1720 \text{ kg})$  the fabric tore at a vertical seam.

Compression

Sample b

After six hours compression by  $P_k = 10 \text{ kN}$  (1020 kg) no visible damages occurred in the

test piece.

Test result

A safe working load SWL = 250 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.

All material weights are minimum weights and may not be lower than the values shown. Test diagram and photo of a test piece see page 2. This certificate expires on 2.2.2024.

1) Raw material: Pure virgin polypropylene (statement of the manufacturer)

<sup>2)</sup> "Directions for use referring to this certificate" see page 3.

Competent Engineer

Christina Pape

SEORO P SEE

Head of Institute

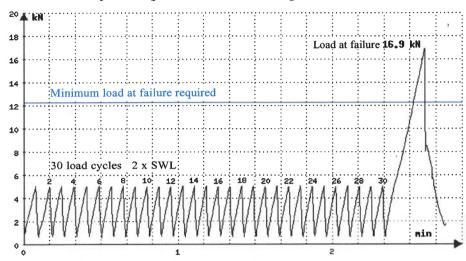
Dr. Herbert Kielbassa

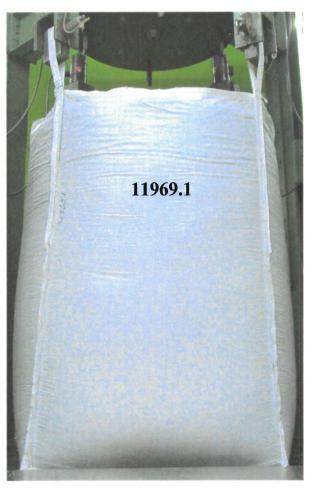


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## FIBC cyclic top lift test - test diagram 11969.1/21 - 2





#### Project data

Applicant : BulkPack Exports Ltd.

Test piece : FIBC 90 cm x 90 cm x 120 cm

Safe working load : SWL = 250 kg

Safety factor : SF = 5:1

#### Test data

+ 49 531 33 90 - 11 + 49 531 33 90 - 13

Phone Telefax Test date : 2.2.2021 Test Standard : ISO 21898

Load at failure : Pb = 16.9 kN = 1720 kg

e-Mail labordata@labordata.com Internet www.labordata.com



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# **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 invalid. 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)	
	Base with discharge spout	
Base dimensions of between 90 cm x 90 cm and 99 cm x 99 cm provided the same geometry is maintained	Base dimensions smaller than 90 cm x 90 cm Base dimensions larger than 99 cm x 99 cm	
Bag height 120 ± 2 cm	Bag heights diverging from 120 ± 2 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: 2.2.2024	

### 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:

WL 250 kg	Safety Factor	5:1
Your logos etc.	Test Certificate No	11969.1/21-2
	Test Certificate Date	2.2.2021
	Approved Laboratory	LABORDATA
	Test Standard	ISO 21898
	FIBC Class	Single trip
	Date FIBC manufactured	
andling Recommendations / Pict	ograms (proposals see <u>www.laborda</u>	uta.com)