

#### Bureau Veritas Consumer Products Services UK Ltd

# **Test Certificate**

**REPORT REF:** ALC P: 145815: 0912 **SAMPLE RECEIVED:** 04/09/2012

**REPORT ISSUED:** 11/09/2012

**ORDER NO: N/A** 

SAMPLE Cacoon Hanging Chair
Style/Item No. TG 04 SG 38

Manufacturer. Hang In Out

APPLICANT: Hang - In - Out LLP

I Waltacre Yealmpton Plymouth PL8 2LY

**EVALUATION** The General Product Safety Regulations 2005 (S. I. No. 1803), mechanical

CONDUCTED: characteristics only.

**STANDARDS** BS EN 1728 : 2001 Domestic furniture – Seating – Test methods for the

**EMPLOYED:** determination of strength and durability.

BS EN 581-2: 2009 Outdoor furniture – Part 2: Mechanical safety requirements and

test methods for seating.

CONCLUSION: It is the opinion of Bureau Veritas CPS UK Ltd that the sample complied with the

requirements of The General Product Safety Regulations 2005 (S. I. No. 1803) with regards to the mechanical characteristics, when tested up to a maximum load

of 2000 N.

Signature:

Peter Hoyle

**AUTHORISED SIGNATORY** 



### **SUMMARY OF EXAMINATION:**

### **INTRODUCTION:**

This report refers to samples that were originally tested and reported as ALC P: 144919:0712. On that occasion the samples became damaged during the Seat Static Load Test.

The client submitted three new support rings: one 1.5m diameter ring, and two 1.8m diameter rings. The two 1.8m diameter rings were of different sizes with respect to the tube diameters. The client requested that we test the smaller of the two, with a tube diameter of 19mm. This was tested with the original 1.8m diameter fabric seat cover.

The results for can be assumed to hold for the 1.5m diameter ring of the same tube diameter, as testing for the larger diameter of 1.8m can be assumed to be more onerous than testing for the smaller diameter of 1.5m.

Our findings were as follows:

## **GENERAL SAFETY ASSESSMENT:**

The samples were examined for any hazards that could cause an injury for the user. The following hazards were evaluated and none were found on either sample:

Sharp edges;

Open-ended tubes;

Burrs;

Shear and squeeze points;

Entrapment hazards.

## **SEAT STATIC LOAD TEST:**

The following test method was adapted from BS EN 1728:2001, using loads and cycle counts from BS EN 581-2:2009.

The sample was mounted via the hanging rope, suspended from a rigid frame of the appropriate height. A vertical load was applied progressively to the seating area, until the required force was reached.

The maximum claimed load stated in the instructions for use was 200kg. Therefore, the test load was 2000 N.

The force was applied through the seat loading pad, as defined in clause 5.5 of BS EN 1728:2001. The loading pad was positioned so that the entire pad was inside the sample, over the centre of the seating area.

A piece of foam was place between the pad and the seat surface. The foam used is defined in clause 5.9 of BS EN 1728:2001, with the following characteristics: 25mm thick polyether foam with a hardness index of 1100 N +/- 100 N. Dimensions were 390mm  $\times$  390mm.

The 2000 N load was applied for 10 cycles, 10 s each application. Upon completion of the test, there was no damage or deformation to the sample.



## **SEAT DURABILITY TEST:**

The following test method was adapted from BS EN 1728:2001, using loads and cycle counts from BS EN 581-2:2009.

The sample was mounted via the hanging rope, suspended from a rigid frame of the appropriate height.

The force was applied through the seat loading pad, as defined in clause 5.5 of BS EN 1728:2001. The loading pad was positioned so that the entire pad was inside the sample, over the centre of the seating area. The force was 1000 N.

A piece of foam was place between the pad and the seat surface. The foam used is defined in clause 5.9 of BS EN 1728:2001, with the following characteristics: 25mm thick polyether foam with a hardness index of 1100 N +/- 100 N. Dimensions were 390mm  $\times$  390mm.

The 1000 N load was applied for 50,000 cycles, 3 s each application. Upon completion of the test, there was no damage or deformation to the sample.



SAMPLE DESCRIPTION Cacoon Hanging Chair Style/Item No. TG 04 SG 38 Manufacturer. Hang In Out

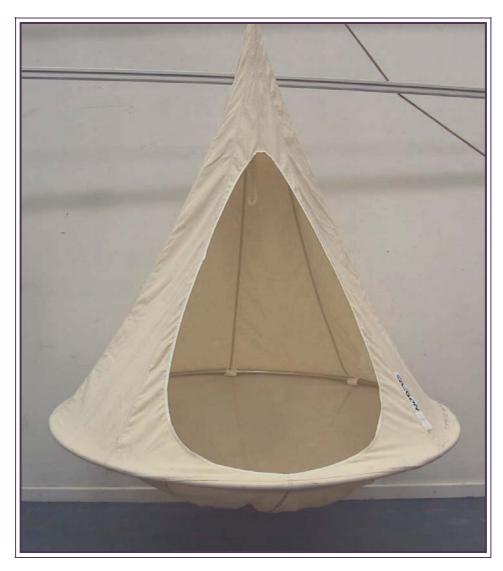


Figure I