

# TEST REPORT



Your Ref: Fax dated 21 Apr 2003

Date: 30 May 2003

Our Ref: 54S031929/KLU

Page: 1/4

DID: 6885 1414

Fax: 6779 3903

**NOTE: This Report** is issued subject to the "Terms and Conditions Governing Technical Services" set out in the "Request for Technical Services" form. The terms and conditions governing the issue of this report are set out overleaf.

## Subject:

Testing of Office chairs submitted by Benithem Sdn Bhd on 21 Apr 2003.

## Tested for:

Benithem Sdn Bhd  
33, Jalan Industri 1,  
Taman Perindustrian Pekan Nanas,  
Pekan Nanas, 81500 Pontian,  
Johor, Malaysia  
Tel: 607 6996668  
Fax: 607 6992655

Attn: Ms Joey Tong

## Date of test:

21 Apr – 30 May 2003

## Description of sample:

One piece of office chair as shown in photograph was received. The following descriptions were given by the client :

|                   |   |  |
|-------------------|---|--|
| Brand             | : | Calor (Mid Back Synchron AJ Arm Chair)   |
| Model             | : | CL8882SYA  |
| Manufacturer      | : | Benithem Sdn Bhd   |
| Country of Origin | : | Malaysia   |
| Description       | : | Injection Moulded Foam For Seat And Back<br>Cofimo Italy Seat Sliding Mechanism<br>SUSPA Germany Gaslift<br>60mm Heavy Duty Twin Wheel Castors<br>7 Level Height Adjustable Armrest With Soft PU Pad<br>Donati Italy Synchron With 4 Locking Mechanism<br>Sleek Designed Aluminium Die Cast Chair Base |



Your product quality and safety mark

**Method of test:**

As requested by the client, the tests were conducted in accordance with the following:

ANSI/BIFMA X5.1 - 1993 "For office furnishings – General-Purpose Office Chairs – Tests"

**Results:****ANSI/BIFMA X5.1 – 1993**

| Clause | Test  | Test parameter   | Assessment       |
|--------|---|--|------------------|
| 5      | Back strength test - static – Type I (Tilt seat)  | Duration 1 min<br>Functional load 890N<br>Proof load 1334N   | N.A.<br>N.A.     |
| 6      | Back strength test - Static - Type IIa (Non tilt or adjustable seat – tilt back)                                | Duration 1 min<br>Functional load 667N<br>Proof load 1112N   | N.A.<br>N.A.     |
| 7      | Back strength test – static – Type IIB (Non tilt or adjustable seat – Fixed, flex, or manually adjustable Back) | Duration 1 min<br>Functional load 667N<br>Proof load 1112N   | Passed<br>Passed |
| 8      | Base test - static  | Loading force 11.1KN for 1 min<br>Loading force 11.1KN until<br>Deflection is reasonably<br>stabilized | Passed<br>Passed |
| 9      | Drop test   | Functional load 102kg<br>Proof load 136kg  | Passed<br>Passed |
| 10     | Swivel test - cyclic  | Cycle 120 000<br>Loading load 102kg  | Passed           |
| 11     | Tilt mechanism test - cyclic  | Cycle 200 000<br>Loading load 102kg  | N.A.             |
| 12     | Seating impact test - cyclic  | Cycle 100 000<br>Loading 57kg  | Passed           |
| 13     | Stability test – dynamic<br>a) Rear stability   | Balancing weight 79kg<br>Applied force - Type I : 89N<br>- Type II : 89N<br>- Type III : 156N          | -<br>-<br>Passed |
|        | b) Front stability  | Chair weight: 22.22kg<br>Applied force – not less than<br>40% of total chair weight                    | Passed           |

**Results (Con't):**


| Clause | Test  | Test parameters  | Assessment            |
|--------|---|--|-----------------------|
| 14     | Arm strength test – vertical - static   | Functional load 890N<br>Proof load 1334N   | Passed<br>Passed      |
| 15     | Arm strength test – horizontal – static   | Functional load 445N<br>Proof load 667N  | Passed<br>Passed      |
| 16     | Back durability test – cyclic – Type I  | Balancing weight 45kg<br>Loading force 445N<br>Cycle 120 000                         | N.A.                  |
| 17     | Back durability test – cyclic – Type Iia & Type IIb   | Balancing weight 45kg<br>Loading force 334N<br>Cycle 120 000                         | Passed                |
| 18     | Caster / chair base<br>a) durability test – cyclic<br>- Hard treads<br>- Soft treads<br><br>b) Caster retention | Balancing weight 136kg<br><br>Cycle 100 000<br>Cycle 36 000<br><br>Applied force 22N | Passed<br>-<br>Passed |
| 19     | Leg strength test - Front Application – static – Type II  | Duration 1 min<br>Functional load 334N<br>Proof load 556N                            | N.A.<br>N.A.          |
| 20     | Leg strength test – side application - static – Type II   | Duration 1 min<br>Functional load 334N<br>Proof load 556N                            | N.A.<br>N.A.          |
| 21     | Footrest durability test – vertical – cyclic  | Loading force 890N<br>Cycle 50 000   | N.A.                  |

Acceptance level for clause 5, 6, 7, 14, 15, 19 & 20:

- Functional load shall cause no structural breakage or loss of serviceability
- Proof load shall cause no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.

Acceptance level for clause 8, 10, 11, 12, 16, 17, 18 & 21:

- Shall cause no structural breakage or loss of serviceability.

  
Kelvin Lau  
Associate Engineer

  
Goh-Chow Chew Fing  
Product Manager  
Consumer & Safety Products  
Testing Group



Calor (Mid Back Synchron AJ Arm Chair)

*K. Ph*