

CERTIFICATE OF COMPLIANCE



GREENGUARD

PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

HAG

HÅG H05

Restrictions:

4562-410

Certificate Number

05/18/2006 - 05/19/2017

Certificate Period

Certified

Status

UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.

Seating units are tested in accordance with ANSI/BIFMA M7.1-2011 and determined to comply with ANSI/BIFMA X7.1-2011 and ANSI/BIFMA e3-2014e Credit 7.6.1. Seating units are modeled in the seating environment.



Environment

UL Environment investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL Environment and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Environment Mark for the identified Product(s) manufactured at the production site(s) covered by the ULE Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Certification Criteria for Mattresses, Bedding, Component Materials and Seating Units

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC _(A)	-	0.25	mg/m ³
Formaldehyde	50-00-0	30.7 (25 ppb)	µg/m ³
Total Aldehydes _(B)	-	0.05	ppm
4-Phenylcyclohexene _(C)	4994-16-5	3.25	µg/m ³
Individual VOCs _(D)	-	1/10th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Applicable to flooring and furniture, including component materials.
- (D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Environment

**Test
report**

Nr. IWQ 330 1531

Reported to: HÅG asa
P.O. Box 50 55 MAJ
0301 Oslo

Object: Office swivel chair range "H 05"
(2 samples supplied by the manufacturer)

Order: Test to British Standard 5459/Part 2, ed. 1990

Findings:

The submitted samples were tested according to the guidelines laid out in British Standard BS 5459, Part 2, ed. 1990 for test level "S" in addition to the tests following EN 1335 Part 1, 2 and 3 (see test report 330 1229)

All tests were carried out under "worst case" conditions.

The submitted samples meet the requirements of test level "S" of British Standard BS 5459 : Part 2 : 1990.

The following pages contain technical data and details of the test.

Nürnberg, 26.09.2000
IWQ / hy/ kl / hz

LGA - Bereich PRODUKTE
Institut für Warenprüfung
und Qualitätsüberwachung

Referat IWQ MBL

Dipl.-Ing. (FH) R. Heym



Test technician

Eberhard Klöber

The test report consists of 4 pages.

Test results

Object

Article: Office swivel chair
Type/model: Modelrange "H 05"
Sample
Number: 2 chairs
delivered: 29.06.00
delivered by: HÅG

Scope of tests

General examination

Test to BS 5459, Part 2, ed. 1990

Applicability of test results

The test results refer solely to the sample tested.

Measurement uncertainty

Unless otherwise stated all dimensions are measured to an accuracy according to DIN 7168-g for old constructions resp. DIN ISO 2768 part 1 "c" for new constructions. For all other physical values the measurement uncertainty is $< \pm 5 \%$.

General examination

Brief description of the sample:

Height adjustable office swivel chair with synchron mechanism, with or without height adjustable arm.

- Seat height adjustable by means of gas spring from Suspa
- denomination of gas spring: 17-04-19 DIN 4550-4
- Seat with tilt mechanism, initial tension adjustable by means of hand levers, blockable in several positions, seat depth adjustable by means of hand wheel (sliding seat)
- Seat and back padded and upholstered
- Back rest height adjustable
- Chair base made of die cast light metal
- 5 break unloaded twin wheel casters type „H“ or „W“
- denomination of the casters: ./.
- caster marking: GR
- caster manufacturer: Guy Raymond
- Further facts: optional height adjustable neck rest with adjustable tension



IWQ MBL 330 1531

Prüfkriterium / Anforderung	Ergebnis	+ positiv - negativ .entfällt												
<p>Requirements to Para. 2.16 BS 5459, Part 2, ed. 1990</p> <p>Summary of results Test following British Standard BS 5459. Part 2, ed. 1990</p> <p>Summary of tests</p> <p>Note:</p> <p>Tests were carried out to the same sample, first 9b - Fore and Aft Safety Test, than 9a Side to Side Safety!</p> <table border="1" data-bbox="105 920 788 1442"> <thead> <tr> <th>Test</th> <th>Description</th> <th>Test conditions</th> <th>Test level S</th> </tr> </thead> <tbody> <tr> <td>9 a</td> <td>Side to Side Safety Test</td> <td>Vertical load V_a max. number of cycles</td> <td>1200 N 500 000</td> </tr> <tr> <td>9 b</td> <td>Fore and Aft Safety Test</td> <td>Seat load Chairs with back rest inclination max. 70°, other chairs Back rest load chairs with back rest inclination max. 70°; other chairs Seat front edge load max. number of cycles</td> <td>1500 N x cos θ 1400 N 1500 N x sin θ 500 N 1400 N 500 000</td> </tr> </tbody> </table> <p>During side to side safety test a fracture started at the chassis after 210000 cycles considered to be a safe failure</p>	Test	Description	Test conditions	Test level S	9 a	Side to Side Safety Test	Vertical load V_a max. number of cycles	1200 N 500 000	9 b	Fore and Aft Safety Test	Seat load Chairs with back rest inclination max. 70°, other chairs Back rest load chairs with back rest inclination max. 70°; other chairs Seat front edge load max. number of cycles	1500 N x cos θ 1400 N 1500 N x sin θ 500 N 1400 N 500 000		+
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Certificate



Prüfbescheinigung nach dem Produktsicherheitsgesetz

Test Certificate in compliance with the Product Safety Law

Bescheinigungs-Nr. (Certificate No.): 15FUP1003-01

Das Produkt entspricht den Anforderungen des Produktsicherheitsgesetzes (ProdSG) § 21 (1) hinsichtlich der Gewährleistung von Sicherheit und Gesundheit und entspricht den derzeit anerkannten Regeln der Technik.

(The product is in compliance with the judicial requirements of the Product Safety Law (ProdSG) § 21 (1) and the currently accepted rules of technology.)

Die Kennzeichnungspflichten des Produktes gemäß §6 ProdSG sind einzuhalten.

(The marking requirements of the product based on §6 ProdSG have to be observed.)

Bescheinigungsinhaber (Certificate Holder)
Scandinavian Business Seating AS
Fridtjof Nansens vei 12 (head office)
0301 OSLO
Norway

Markenname (Brandname)
HAG

Fertigungsstätte (Manufacturing Site)
Scandinavian Business Seating AS
Sundveien
7374 Røros
Norway

Produkt (Product)
Büroarbeitsstuhl
Office work chair

Typbezeichnung (Type)
HAG H05 5100, HAG H05 5200, HAG H05 5300, HAG H05 5400,
HAG H05 5500, HAG H05 5600

Beschreibung (Description)
625W x 815H x 550D, 625W x 820H x 550D, 625W x 890H x 550D,
625W x 885H x 550D, 625W x 970H x 550D, 625W x 965H x 550D
(Einzelheiten siehe Anhang / details see attachment)

Prüfbericht-Nr. (Test Report No.)
FUHLFP2014-15823R:2015-07-03

Geprüft nach (Tested according to)
EN 1335-1:2000+AC:02
EN 1335-2:2009
EN 1335-3:2009
PAK-Anforderung für GS (PAH requirement for GS) AfPS GS 2014:01 PAK

Gültig bis (valid until)
2020-07-08

Erstellt am (Issued on)
2015-07-09



Dem Zertifikat liegen die Allgemeinen Geschäftsbedingungen der Intertek Deutschland GmbH zu Grunde. Bitte beachten Sie die umseitigen Hinweise.
 The General Business Conditions of Intertek Deutschland GmbH is an integral part of this certificate. Please also refer to the information overleaf.

Intertek Deutschland GmbH, Stangenstraße 1, 70771 Leinfelden-Echterdingen

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 Tel.: +49 711 27311-0, Fax: +49 711 27311-559, E-Mail: gs@intertek.com, web: www.intertek.de/directory

Anhang zur Bescheinigung Nr.: 15FUP1003-01

(Attachment to Certificate No.)

Die Modellreihe "HAG H05" umfasst folgende Typbezeichnungen (model range "HAG H05" consist of types):

- (1) "5100"
- (2) "5200"
- (3) "5300"
- (4) "5400"
- (5) "5500" und/and
- (6) "5600"

(1) 625W x 815-941H x 550D, 12.5 kg, niedere teilweise gepolsterte Rückenlehne (low backrest, partly upholstered backrest)

(2) 625W x 820-946H x 550D, 13.0 kg, niedere, gepolsterte Rückenlehne (low backrest, complete upholstered backrest)

(3) 625W x 890-1016H x 550D, 16.0 kg, mittelhohe, teilweise gepolsterte Rückenlehne (middle high backrest, partly upholstered)

(4) 625W x 885-1011H x 550D, 16.5 kg, mittelhohe, gepolsterte Rückenlehne (middle high backrest, complete upholstered)

(5) 625W x 970-1096H x 550D, 18.0 kg, hohe, teilweise gepolsterte Rückenlehne (high backrest, partly upholstered)

(6) 625W x 965-1091H x 550D, 19.0 kg, hohe, gepolsterte Rückenlehne (high backrest, complete upholstered)



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Test- report

Q IWQ MBL 736 1364e

Reported to: HÅG asa
7374 Roros
Norway

Object: Office work chair model range "H05"
(2 samples supplied by the client)

Order: Test of dimensions according to NPR 1813:2004

Findings:

The office work chairs of model range "H05" (NPR version) **meet** the dimensional requirements of the dutch practice guidelines NPR 1813, ed. 04.2004

The evaluation of the dimensions to NPR 1813 was carried out supplementary to the configuration for the existing GS-mark to DIN EN 1335 in accordance with the DIN EN 1335, part 1, ed. 08.2002.

For the GS-version, the results of strength and durability test following DIN EN 1335, part 2 and 3, ed. 08.02 and DIN 4550, ed. 05.92 respecting the actual state of safety technique are reported in our test report IWQ MBL 330 1229.


The office work chair complies with type A of DIN EN 1335, part 1. Thus the requirements for ergonomic design of the EU-Video Display Terminal Directive as laid out in DIN EN ISO 9241 part 5, ed. 08.1999 are met.

Nuremberg, 2006-06-22
Q IWQ MBL hy/ ra/şe

LGA QualiTest GmbH
Furniture Test Institute


Dipl. Ing. (FH) R. Heym
Head of Competence Centre




Franz Rackl
Test Officer

This test report consists of 4 pages. No part of this report may be reproduced without the express written permission of the LGA.

Test Results

Object:

Article: Office work chair

Type/Model: H05
H05 5100 Low back partly upholstered
H05 5200 Low back fully upholstered
H05 5300 Medium back partly upholstered
H05 5400 Medium back fully upholstered
H05 5500 High back partly upholstered
H05 5600 High back fully upholstered

Number of samples: 2

delivered: 17.05.2006
delivered by: HÅG
Reg. No.: 365 / 2 and 3

Scope of tests

General examination

Dimensions to NPR 1813:2003

Applicability of test results

The test results refer solely to the samples tested. The digital pictures shown in this report are for additional information only and are not part of this report.

Measurement uncertainty

Unless otherwise stated all dimensions are measured to an accuracy according to DIN 7168-g for old constructions resp. DIN ISO 2768 part 1 "c" for new constructions. For all other physical values the measurement uncertainty is < 5 %. The test has been carried out at standard climate 23 °C/50 % r.h.

General examination

Brief description of the sample

- Seat height adjustable by means of gas cylinder from SUSPA
- Denomination of gas cylinder:
Part no. K70202, sample order no. 143617
300 N, DIN 4550-4
- Seat mechanism with tilt function,
- Initial tension adjustable by means of hand levers, blockable
- Seat depth (Sliding seat) and backrest simultaneous adjustable by hand wheel, but also individually adjustable
- Seat and back padded and upholstered
- Arm rests adjustable in height and width.
- Base made of die cast light metal
- 5 brake unloaded twin wheel castors Type H and W
- Marking of the castors: GR
- Castor Manufacturer: Guy Raymond
- Other characteristics: Flexible head support optional



Model H5300



Backrests H5100, H5500



Model H5300



Backrests H5200, H5600

Prüfkriterium / Anforderung	Ergebnis		+ positiv - negativ
Technical Test - HÅG H05 - Model 5100, 5200, 5300, 5400, 5500, 5600			
Dimensions following NPR 1813 - Table A - Office work chairs adjustable			
Denomination/Code letter	Nominal value (mm)	Actual Value (mm)	
Seat height	a 410 - 550	407 - 548	+
Seat depth	b 380 - 480	387 - 480	+1)
Depth of seat surface fix	c 440 min.	435	+1)
Seat width	d 400 min.	475	+1)
Seat inclination	e $\leq +3^\circ$ to $\geq -7^\circ$	+5,5° - -14°	+1)
Height of lumbar support „S“	f ≤ 170 to ≥ 230	150 - 230	+1)
Height of back pad	g 370 min.	445/500/560 partly upholstered 460/510/590 fully upholstered	+ +
Height of upper edge of the back rest above the seat	h 430 min.	430 - 510	+1)
Back rest width	i 360 min.	360 partly upholstered 370 fully upholstered	+ +
Back rest radius horizontal	k 400 min.	400	+1)
Back rest inclination	l 15° min.	20°	+1)
Arm rest length	n 200 min.	200	+
Arm rest width	o 50 min.	105	+
Arm rest height above the seat	p 200 - 300	200 - 305	+2)
Adjustment range	100 min	105	+2)
Distance of arm rest to seat front edge	q 200 min.	175 - 260	+
Clear width between the arms	r 360 - 510..	360 - 505	+
Maximum offset of the underframe	s 365 max (415 max)	373	+
Stability dimension	t 195 min.	241	+

The supplementary dimensional evaluation of the components divergent to the GS-label- version of test report 330 1229 was carried out in the reference position of the seat close to the horizontal.

- 1) Dimension from test report 330 1229
- 2) Dimension including height gained by width adjustment