

**Test report**                      **16-9659**

**Article:**                              8240, 8242, 8244

**Test requested by:**              Kinnarps AB



**Tests are carried out according to standard:**      **EN 1335-1:2000, 1335-2 and -3:2009 type A chair**  
(Based on 110kg person weight)

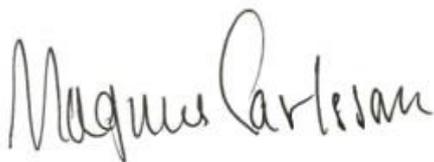
**Discrepancies:**                      None

**Result and observations:**              The sample submitted for test fulfils the requirements in above mentioned standards.

**Measurement:**                      Detailed information about measurement uncertainty is provided on request by Kinnarps Test and Verification Center.

**Report:**                              This report relates to sample submitted for test and no other. The report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Kinnarp 2<sup>nd</sup> of November 2016



Magnus Carlsson  
(Approved by)



Susanne Norling  
(Tested by)

**Item description:**

**Date of manufacture:** 160804  
**Date of arrival:** 160810  
**Date of test:** 160810 - 161102  
**Overall dimensions:** Width 615 mm, deep 615 mm, height 965 mm  
**Weight:** 8780 16,9kg  
8782 18,3kg  
8784 19,1kg

**Materials, construction:**

**Seat and backrest** Plastic and metal frame moulded in foam  
**Armrests** Armrest 2: TPU/TPU, Armrest 4: Technogel /TPU  
**Under frame** Aluminium star base, castors

**Test conditions:**

**Laboratory atmosphere** (20 ± 5)° C Within limits during test

Stability measurement with and without armrests.  
Armrest tests are performed with left armrest 2 and right armrest 4.



Test and method			Requirements	Test results	Pass/Fail or N/A
<b>DIMENSION type A</b>		<b>EN 1335-1:2000</b>			
Seat height "a"	adjustable min min adjustment range	6.1	400-510 mm 120 mm	400-530 mm 130 mm	<b>Pass</b>
Seat depth "b"	adjustable min min adjustment range	6.2	400-420 mm 50 mm	400-475 mm 75 mm	<b>Pass</b>
Depth of the seat surface "c"	min depth	6.3	380 mm	450 mm	<b>Pass</b>
Seat width "d"	min width	6.4	400 mm	430 mm	<b>Pass</b>
Inclination of seat "e"	min range min adjustment range	6.5	-2° - -7° 6°	+5,9° - -12,3° 18,2°	<b>Pass</b>
Backrest height to supporting point S "f"	min range min adjustment range	6.6	170-220 mm 50 mm	155-245 mm	<b>Pass</b>
Height of the back pad "g"	adjustable min non adjustable	6.7	220 mm 260 mm	685 mm	<b>Pass</b>
Height of the upper edge of backrest "h"	above seat min height	6.8	360 mm	560-650 mm	<b>Pass</b>
Width of backrest "i"	min width	6.9	360 mm	400 mm	<b>Pass</b>
Horizontal radius of backrest "k"	min radius, concave form	6.10	r 400	500	<b>Pass</b>
Backrest inclination "l"	min adjustment range	6.11	15°	15°	<b>Pass</b>
Length of armrests "n"	min length	6.12	200 mm	arm arm 2: 220 mm 4: 250 mm	<b>Pass</b> <b>Pass</b>
Width of armrests "o"	min width	6.13	40 mm	arm arm 2: 70 mm 4: 100 mm	<b>Pass</b> <b>Pass</b>
Height of armrests above seat "p"	adjustable min non adjustable between	6.14	200-250 mm 200-250 mm	arm arm 2: 180-300 mm 4: 200-230 mm -	<b>Pass</b> <b>Pass</b>

Test and method		Requirements	Test results	Pass/Fail or N/A
Distance from front of armrests to front edge of seat surface (in point A) "q" min distance	6.15	100 mm	>100 mm	Pass
Clear width between armrests "r" between	6.16	460-510 mm	430-510 mm	Pass
Maximal offset of the under frame "s" max size with castors	6.17	415 mm	345 mm	Pass
Stability dimension "t" min size	6.18	195 mm	235 mm	Pass
<b>SAFETY EN 1335-2:2009</b>				
Safety distance accessible moving parts	4.1.1	≤ 8 mm or ≥ 25 mm	No remarks	Pass
Edge/corner round-edged/radius min radius	4.1.1	2 mm	No remarks	Pass
All other edges	4.1.1	no rough surfaces, burrs or sharp edges	No remarks	Pass
End of hollow components	4.1.1	closed or capped	-	N/A
Components/assembly parts	4.1.2	injures and inadvertent operations are avoided	No remarks	Pass
Adjusting devices	4.1.2	manipulate from sitting pos	No remarks	Pass
Adjustable/connection parts	4.1.3	no chance to come loose	No remarks	Pass
Part with consistent grease	4.1.4	not accessible	No remarks	Pass
Support to floor	4.4	identical constructions	No remarks	Pass
User information	5	Intended use, adjustment, ergonomic, upkeep, type of wheel	No remarks	Pass
Branding on chair or information in instruction for use	5	expert shall handle gas spring change/repair	No remarks	Pass

Test and method	Requirements	Test results	Pass/Fail or N/A
<b>SAFETY, STABILITY</b> <b>EN 1335-2 and -3 :2009</b>			
Front edge overturning 27 kg	7.1.1      not overbalance	*) No remarks	<b>Pass</b>
Forwards overturning 600N	7.1.2      not overbalance with horizontal force 20N	*) No remarks	<b>Pass</b>
Forward overturning for chair with foot rest 1100N	7.1.3      not overbalance with horizontal force 20N	-	<b>N/A</b>
Sideways overturning for chair without armrests Vertical seat                      600N	7.1.4      not overbalance with horizontal force 20N	No remarks	<b>Pass</b>
Sideways overturning for chair with armrests Vertical seat                      250N Vertical armrest                      350N	7.1.5      not overbalance with horizontal force 20N	**) No remarks	<b>Pass</b>
Rearwards overturning Chairs without backrest inclination Vertical seat                      600N Horizontal backrest                      192N	7.1.6      not overbalance	*) No remarks	<b>Pass</b>
Rearwards overturning Chair with backrest inclination Load with 13 discs                      á 10 kg	7.1.7      not overbalance	*) No remarks	<b>Pass</b>
<b>SAFETY, DURABILITY</b> <b>EN 1335-3:2009</b>			
Seat front edge static load 1600N                      10 times	7.2.1	No remarks	<b>Pass</b>
Combined seat and back static load test 1600N                      10 times 560N	7.2.2	No remarks	<b>Pass</b>
Foot rest static load test 1300N                      10 times	7.2.6	-	<b>N/A</b>
<b>Remarks, comments</b> *) Tested without armrests, with arm 2 and with arm 4 **) Tested with both Arm2 and Arm4			

Test and method			Requirements	Test results	Pass/Fail or N/A	
Seat and back durability			7.3.1	No damage or fracture		
Loading point A	1500N	120 000 c		No remarks	Pass	
Loading point C	1200N	80 000 c		No remarks	Pass	
Loading point B	320N	80 000 c				
Loading point J	1200N	20 000 c		No remarks	Pass	
Loading point E	320N	20 000 c				
Loading point F	1200N	20 000 c		No remarks	Pass	
Loading point H	320N	20 000 c				
Loading point D and G (alternating)	1100N	20 000 c		No remarks	Pass	
Armrest fatigue 10° outwards from vertical	400N	60 000 c	7.3.2	** No remarks	Pass	
Armrest downward static load - central			7.2.3	** No remarks	Pass	
Before stability test	750N	5 times/arm				
Armrest downward static load - central				** No remarks	Pass	
After stability test	900N	5 times/arm				
Rolling resistance of unloaded chair			7.4	≥ 12N	No remarks	Pass
<b>FUNCTIONAL TESTS</b>	<b>EN 1335-3:2009</b>		Annex C	No damage or fracture		
Armrest downward static load – front	450N	5 times/arm	7.2.4	** No remarks	Pass	
Armrest sideway static load test	400N	10 times	7.2.5	** No remarks	Pass	
Swivel test	60 kg/35 kg	120 000 c	7.3.3	No remarks	Pass	
Foot rest durability	900N	50 000 c	7.3.4	-	Pass	
Castor and chair base durability	110 kg	36 000 c	7.3.5	No remarks	Pass	
<b>Remarks, comments</b>						
**) Tested with both Arm2 and Arm4						

End of report