Test report 16-9101

Article: Stack S+
4-legs, plastic

Test requested by: Jan Jismyr
Materia AB
Tranås Sweden

Tests are carried out according to standard: **EN 1729-1:2015, EN 1729-2:2012**

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 22nd of September 2016

Daniel Landberg
(Approved by)

Susanne Norling
(Tested by)

Item description

Date of

- manufacture: 160821

- arrival: 160901

- test: 160916 – 160922

Materials, construction

Seat and backrest: Plastic

Armrest: -

Under frame: Ø 19mm Steel tube

Dimensions (mm)

Total width: 480

Total depth: 500

Total height: 770

Weight (kg): 4,7kg

Test conditions

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

Size mark	0	1	2	3	4	5	6	7
Colour code	White	Orange	Violet	Yellow	Red	Green	Blue	Brown
Popliteal range (without shoes)	200-250	250-280	280-315	315-355	355-405	405-435	435-485	485+
Stature range (without shoes)	800-950	930-1160	1080-1210	1190-1420	1330-1590	1460-1765	1590-1880	1740-2070

Test and method			Requirements	Test results	Fit size mark
DIMENSION **EN 1729-1** Seat slopes between -5° and +7°			According to size mark 6		**6**
Seat height measured at front edge annex A to floor or annex D and E to foot rest.		h 8	460 ± 10 mm	450	**Pass**
High of seat above floor Annex D and E		H10	For information	-	**N/A**
Effective depth of seat		t 4	420 ± 25 mm (Cover size 3-7)	445	**Pass**
Seat width	min	b 3	380 mm	400	**Pass**
Distance between point S and back of seat pad	max	x	50mm	0	**Pass**
Backrest height	min	h 7	100 mm	255	**Pass**
Width of backrest	min	b 4	330 mm	440	**Pass**
Horizontal radius of backrest	min	r 2	r 300	>300	**Pass**
Inclination of seat		α	-5° to +7°	-1,7°	**Pass**
Angle between seat and backrest		γ	95° to 110°	109°	**Pass**
Height of armrest above seat		p	230 +10 to -20	-	**-**
Width between armrests		r	460 to 510	-	**-**
Distance from backrest to front edge of armrest max		q	275	-	**-**
With of armrest	min	o	20	-	**-**
Length of armrest	min	n	80	-	**-**
Requirement for adjustable chairs Annex A.4 / D4					
5 MARKING **EN 1729-1**					
Size mark identification, Name of manufacturer, Date of production			easily visible	No remarks	**Pass**
High chairs Information of reference to table high			Label or information to web address	-	**-**
6 INSTRUCTIONS					
Instructions for Maintenance, Installation for multi-size furniture, adjustability and warning concerning gas lifts			Label or information to web address	-	**-**

Test and method			Requirements	Test results	Pass/Fail or N/A
SAFETY	**EN 1729-2:2012**	**4**			
Edges of seat, back and arm rests, which are in contact with the user when sitting in the chair shall be rounded min			2 mm radius	*No remarks*	**Pass**
All other edges and corners with which the user may come into contact with normal use shall be			smooth, rounded or chamfered and shall have no burrs	*No remarks*	**Pass**
Distance between accessible moving parts (with the exception of setting up and folding)			< 8 mm or ≥ 25 mm	-	**N/A**
Adjustment controls			shall not operate inadvertently or accidently	-	**N/A**
Open ends and feet of tubular components			shall be capped or otherwise closed	*No remarks*	**Pass**
Parts shall not be detachable without use of an appropriate tool				*No remarks*	**Pass**
Parts which are lubricated shall be covered				-	**N/A**
STABILITY	**EN 1729-2:2012**	5.2	According to chair size mark 6		
Forward stability of chairs Seat load 600N Horizontal force 20N		5.2.2	No overturning	*80N*	**Pass**
Sideways stability of chairs without armrests Seat load 600N Horizontal force 20N		5.2.3.1	No overturning	*120N*	**Pass**
Sideways stability of chairs with armrests Seat load 250N, armrest load 350 N Horizontal force 20N		5.2.3.2 (2012)	No overturning	-	**N/A**
Rearwards stability of chair Seat load 600N Horizontal force 180 N		5.2.4	No overturning	*196N*	**Pass**
Rearwards stability of chairs with back rest inclination 13 pcs 10 kg discs on seat nearest to back rest		5.2.5 (2012	No overturning	-	**N/A**
Stability of chairs placed on table tops Apply an impact of 2Nm (31 mm drop height) at a height 400 mm from table surface perpendicular to backrest repeat 3 times		B 1	Annex B (informative) No requirement The chair shall not fall to floor	-	**N/A**

Test and method			Requirements	Test results	Pass/Fail or N/A
STRENGTH AND DURABILITY **EN 1729-2:2012**		**5.3**	No damage, no loss of functions, no visible fracture or breakage		
Seat static load of chair Load 2000N Back static load of chair Load max 700N	10 c	5.3.2		*No remarks*	**Pass**
Seat durability of chair Load 1250N Back durability of chair Load 300N	100 000 c	5.3.3		*No remarks*	**Pass**
Seat front edge durability Load 800N	50 000 c	5.3.4		*No remarks*	**Pass**
Sideway static load of chair Vertical load 1600N Horizontal load max 500N	10 c	5.3.5		*No remarks*	**Pass**
Forward static load of chair Vertical load 1600N Horizontal load max 600N	10 c	5.3.6		*No remarks*	**Pass**
Seat impact of chair Drop height 300 mm	10 c	5.3.7		*No remarks*	**Pass**
Back impact of chair Fall height 620 mm	10c	5.3.8		*No remarks*	**Pass**
Static load of foot rail Vertical load 1300N	10 c	5.3.9		-	**N/A**
Drop test Front leg and rear leg drop height 600 mm	5 c	5.3.10		*No remarks*	**Pass**
Foot rail durability Vertical load 1000 N	50 000c	5.3.11		-	**N/A**
Armrest static load Vertical load 600N Overload Vertical load 900N	10c	5.3.12		-	**N/A**
Remarks, comments;					

End of report