

ISO 14001

CERTIFIKAT

SP är ett av SWEDAC ackrediterat organ för certifiering av miljöledningssystem
SP is a Certification Body, accredited by SWEDAC, for certification of eco management systems



CERTIFICATE

nr/no. 2133 M

Härmed intygas att:/This is to certify that:

LAMMHULTS MÖBEL AB

har ett miljöledningssystem som uppfyller kraven enligt SS-EN ISO 14001:2004 vad gäller:
has an eco management system that fulfils the requirements of SS-EN ISO 14001:2004 with respect to:

Utveckling, tillverkning och marknadsföring av möbler för företag och organisationer
Development, manufacture and marketing of furniture for companies and organisations

Certifikatet är giltigt till och med 31 december 2009 och utfärdades ursprungligen 15 oktober 1998 gentemot SS-EN ISO 14001:1996. Ytterligare information finns på www.sp.se.
This certificate is valid until and including 31st December, 2009 and was originally issued 15th October, 1998 in compliance to SS-EN ISO 14001:1996. Further information can be seen at www.sp.se.

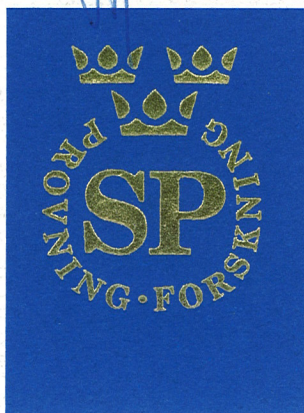
Borås den 14 december 2006/14th December, 2006

SP Sveriges Provnings- och Forskningsinstitut
SP Swedish National Testing and Research Institute
Certifiering - Certification


Lennart Månsson

De Projectinrichter

www.deprojectinrichter.com
088 - 650 12 34



ISO 9001

CERTIFIKAT

SP är ett av SWEDAC ackrediterat organ för certifiering av ledningssystem för kvalitet
SP is a Certification Body, accredited by SWEDAC, for certification of quality management systems



CERTIFICATE

nr/no. 2133

Härmed intygas att:/This is to certify that:

LAMMHULTS MÖBEL AB

har ett ledningssystem för kvalitet som uppfyller kraven enligt SS-EN ISO 9001:2008 vad gäller:
has a quality management system that fulfils the requirements of SS-EN ISO 9001:2008 with respect to:

**Utveckling, tillverkning och marknadsföring av möbler och inredningsprodukter
för företag och organisationer**

*Development, manufacture and marketing of furniture and furnishing products
for companies and organisations*

Certifikatet är giltigt till och med 6 februari 2015 och utfärdades ursprungligen
6 februari 2012. Ytterligare information finns på www.sp.se.

*This certificate is valid until and including 6 February, 2015 and was originally issued
6 February, 2012. Further information can be seen at www.sp.se.*

Borås den 6 februari 2012/6 February, 2012

SP Sveriges Tekniska Forskningsinstitut
SP Technical Research Institute of Sweden
Certifiering - Certification


Lennart Månsson

Detta är en avskrift av
originalcertifikatet
utförd av SP./ This is
a duplicate of the
original certificate
issued by SP.



ENVIRONMENTAL PRODUCT DECLARATION

CARE INSTRUCTION



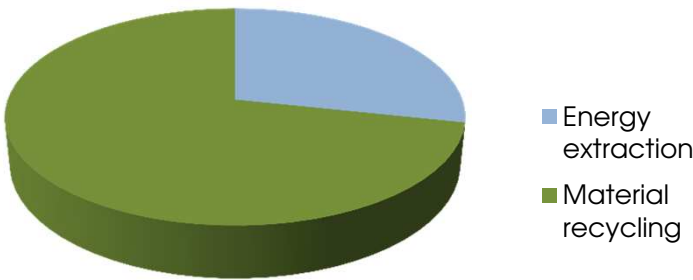
PRODUCT: Archal

MODEL: 4-feet swivel armchair, upholstered

DIMENSTIONS: Width 55 cm
Depth 57 cm
Height 80 cm

MATERIAL	SPECIFICATION	Weight (gr)	%	Recycling instruction
Wood / Woodbased materials	Seat: Moulded beech veneer	2 500	21,74%	Energy extraction
Metal	Foot: Aluminium EN AB-46000 (SS4250) 2490 g Pipe cover: Aluminium 6463-T6 140 g Center seat attach: Aluminium EN AB-46000 (SS4250) 700 g Seat attach: Aluminium EN AB-46000 (SS4250) 2420 g Armrest: Aluminium EN AB-46000 (SS4250) 1460 g Axle: Steel C45E (SS 1672) 50 g Swivel cylinder: Steel 830 g Screw + Nails: Steel 90 g	8 180	71,12%	Material recycling
Plastic	Plastic details: PP Copolymer Flexible Inlay: Trekollan	180	1,57%	Energy extraction
Adhesives	Waterbased textile adhesive	1	0,01%	Energy extraction
Padding material	Polyether	330	2,87%	Energy extraction
Upholstery	Textile (customers choice) Fibertex	250	2,17%	Energy extraction
Surface treatment, wood			0,00%	
Surface treatment, metal (customer selected)	Powder coating	60	0,52%	Material recycling
Other materials			0,00%	
Total weight		11 501	100,00%	
Packaging	Corrugated cardboard and polyether			Material recycling Energy extraction

Recycling of the product



PRODUCTION PROCESS AND ENERGY CONSUMPTION

- There are no emissions to air, water or ground during the manufacturing of this product.
- Lammhults premises are heated with locally produced central heating.
- Lammhults uses eco-labeled electricity (hydropower).
- Lammhults pre-separate all waste material in our premises. 40% of the waste material is recycled, 60% is used for energy extraction.



PRODUCT LIFESPAN

- This piece of furniture is designed for a long life. Maintain the product according to the care instruction.
- Lammhults offers reconditioning and replacement of worn-out components.
- When the piece of furniture has served its time, the components can be separated and sent to material recycling or energy extraction.

ENVIRONMENTAL ASPECTS OF THIS PRODUCT

- All wood-based materials come from FCS- or PEFC certified forests.
- Formaldehyde emissions from veneers fulfil E1 Norm ENV 717-1.
- The powder coating contains no substances of concern for health or environment.
- The polyurethane foam does not contain any flame retardants. We offer CMHR foam on request.

CARE INSTRUCTION

CLEANING AND MAINTENANCE OF TEXTILE / LEATHER

- Textile or leather is a customers choice and varies in material, quality etc. We therefore refer to the supplier of the used textile or leather.

CLEANING AND MAINTAINING POLISHED OR POWDER COATED SURFACES

- Dampen a clean cloth with window cleaning fluid.
- Wipe the surface.
- Dry with a clean, dry cloth.

THIS PRODUCT IS TESTED ACCORDING TO FOLLOWING STANDARDS

- EN 15373:2007 Furniture - Strength, durability and safety - requirements for non-domestic seating, level 2.
- EN 12720:2009 Furniture - Assessment of surface resistance to cold liquids.
- SIS 83 91 17:1973 Furniture and fittings for housing. Determination of surface resistance to scratches.
- EN ISO 105-E04:2008 Tests for colour fastness - Part E04: Colour fastness to perspiration.

Lammhults develops and markets modern furniture of international design for companies with high demands on quality and design. We cooperate with some of the leading contemporary furniture designers. What we accomplish together shall be elegant, effective and eco-friendly. Lammhults is part of Lammhults Design Group.

ENVIRONMENTAL PRODUCT DECLARATION

CARE INSTRUCTION



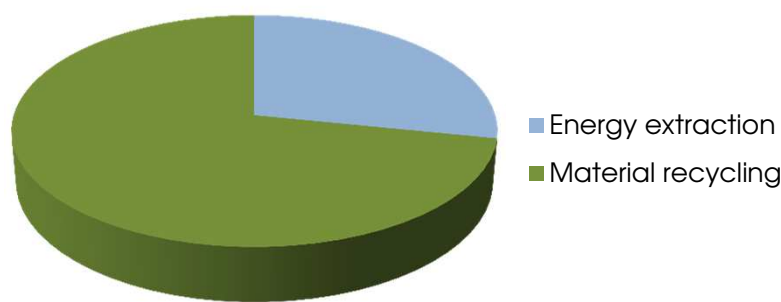
PRODUCT: Archal

MODEL: 5-feet swivel armchair, upholstered

DIMENSTIONS: Width 67 cm
Depth 67 cm
Height 80-85 cm

MATERIAL	SPECIFICATION	Weight (gr)	%	Recycling instruction
Wood / Woodbased materials	Seat: Moulded beech veneer	2 500	21,61%	Energy extraction
Metal	Foot: Aluminium EN AB-46000 (SS4250) 2560 g Pipe cover: Aluminium 6463-T6 140 g Center seat attach: Aluminium EN AB-46000 (SS4250) 700 g Seat attach: Aluminium EN AB-46000 (SS4250) 2420 g Armrest: Aluminium EN AB-46000 (SS4250) 1460 g Axle: Steel C45E (SS 1672) 50 g Swivel cylinder: Steel 830 g Screw + Nails: Steel 90 g	8 250	71,30%	Material recycling
Plastic	Plastic details: PP Copolymer Flexible Inlay: Trekollan	180	1,56%	Energy extraction
Adhesives	Waterbased textile adhesive	1	0,01%	Energy extraction
Padding material	Polyether	330	2,85%	Energy extraction
Upholstery	Textile (customers choice) Fibertex	250	2,16%	Energy extraction
Surface treatment, wood			0,00%	
Surface treatment, metal (customer selected)	Powder coating	60	0,52%	Material recycling
Other materials			0,00%	
Total weight		11 571	100,00%	
Packaging	Corrugated cardboard and polyether			Material recycling Energy extraction

Recycling of the product



PRODUCTION PROCESS AND ENERGY CONSUMPTION

- There are no emissions to air, water or ground during the manufacturing of this product.
- Lammhults premises are heated with locally produced central heating.
- Lammhults uses eco-labeled electricity (hydropower).
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PRODUCT LIFESPAN

- This piece of furniture is designed for a long life. Maintain the product according to the care instruction.
- Lammhults offers reconditioning and replacement of worn-out components.
- When the piece of furniture has served its time, the components can be separated and sent to material recycling or energy extraction.

ENVIRONMENTAL ASPECTS OF THIS PRODUCT

- All wood-based materials come from FCS- or PEFC certified forests.
- Formaldehyde emissions from veneers fulfil E1 Norm ENV 717-1.
- The powder coating contains no substances of concern for health or environment.
- The polyurethane foam does not contain any flame retardants. We offer CMHR foam on request.

CARE INSTRUCTION

CLEANING AND MAINTENANCE OF TEXTILE / LEATHER

- Textile or leather is a customers choice and varies in material, quality etc. We therefore refer to the supplier of the used textile or leather.

CLEANING AND MAINTAINING POLISHED OR POWDER COATED SURFACES

- Dampen a clean cloth with window cleaning fluid.
- Wipe the surface.
- Dry with a clean, dry cloth.

THIS PRODUCT IS TESTED ACCORDING TO FOLLOWING STANDARDS

- EN 15373:2007 Furniture - Strength, durability and safety - requirements for non-domestic seating, level 2.
- EN 12720:2009 Furniture - Assessment of surface resistance to cold liquids.
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ENVIRONMENTAL PRODUCT DECLARATION CARE INSTRUCTION



PRODUCT: Archal

MODEL: Chair

DIMENSIONS: Width 47/51 cm
Depth 57 cm
Height 80 cm

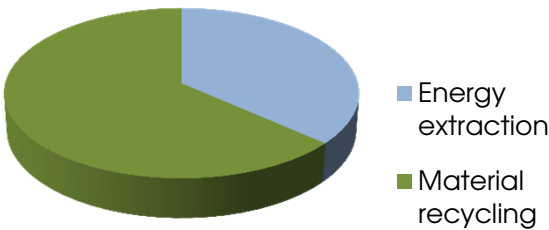
MATERIAL	SPECIFICATION	Weight (gr)	%	Recycling instruction
Wood / Woodbased materials	Seatshell: Moulded Ash/birch/venge veneer.	2 500	35,65%	Energy extraction
Metal	Frame: Recycled aluminium Screw: Steel	3 900	55,62%	Material recycling
Plastic	Foot: PP Copolymer Staple pad: ABS	505	7,20%	Material recycling
Glue			0,00%	Energy extraction
Padding material			0,00%	
Upholstery			0,00%	
Surface treatment, wood	Clear varnish or stain	57	0,81%	Energy extraction
Surface treatment, metal (customer selected)	Polished or powder coated	50	0,71%	Material recycling
Other materials			0,00%	
Total weight		7 012	100,00%	
Packaging	Corrugated cardboard and plastics			Material recycling Energy extraction

LABELING

The product is labeled according to the Swedish reference system for furniture Möbelfakta and the Nordic Ecolabel



Recycling of the product



PRODUCTION PROCESS AND ENERGY CONSUMPTION

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- Lammhults premises are heated with locally produced central heating.
- Lammhults uses eco-labeled electricity (hydropower).
- Lammhults pre-separate all waste material in our premises. 40% of the waste material is recycled, 60% is used for energy extraction.



PRODUCT LIFESPAN

- This piece of furniture is designed for a long life. Maintain the product according to the care instruction.
- Lammhults offers reconditioning and replacement of worn-out components.
- When the piece of furniture has served its time, the components can be separated and sent to material recycling or energy extraction.

ENVIRONMENTAL ASPECTS OF THIS PRODUCT

- All wood-based materials come from FCS- or PEFC certified forests.
- Formaldehyde emissions from veneers fulfil E1 Norm ENV 717-1.
- Surface treatment of wooden components is done with water-based varnish or stain.
- The frame contains of 90% recycled aluminium.
- The powder coating contains no substances of concern for health or environment. The best environmental choice is a polished frame.

CARE INSTRUCTION

CLEANING AND MAINTENANCE OF FURNITURE THAT HAS BEEN TREATED WITH WATERBASED VARNISH OR STAIN

- Your piece of furniture is treated with a waterbased clear varnish or stain.
- It may be necessary to clean it regularly in order to maintain its beautiful surface.
- Use a damp cloth and a very gentle cleaning agent. Do not allow moisture to remain on the surface. Wipe off with water and wipe dry with a soft cloth.
- NB! Do not use scouring agents or other substances that contain abrasives. Do not use cleaning agents that contain ammonia.

CLEANING AND MAINTAINING POLISHED OR POWDER COATED SURFACES

- Dampen a clean cloth with window cleaning fluid.
- Wipe the surface.
- Dry with a clean, dry cloth.

THIS PRODUCT IS TESTED ACCORDING TO FOLLOWING STANDARDS

- EN 15373:2007 Furniture - Strength, durability and safety - requirements for non-domestic seating, level 2.
- EN 12720:2009 Furniture - Assessment of surface resistance to cold liquids.
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ENVIRONMENTAL RATIONALE, ARCHAL



The Archal family of chairs is made of three kinds of material:

1. Aluminium
2. Wood; seat shell
3. Plastic for upholstering, stack protectors, glides and rocking mechanism.

The products consist of 55–75% aluminium.

(Standard chair contains 55% aluminium by weight; chair with swivel base and armrests 75% aluminium by weight.).

Archal components are easy to remove for recycling of materials or energy.

Aluminium components are used for material reclamation. Wood, upholstery materials, textiles and plastic are flammable materials that can be used for energy extraction.

The wood in the seat shell is always FSC/PEFC certified and surface treated with water-based lacquer.

The most prominent green advantage is not only the choice of aluminium but also its source; the reclaimed raw material was both smelted and cast within a 100 km radius of Lammhult. This is wholly unique for aluminium parts, which are otherwise produced in low-cost countries.

The cast components are 90% aluminium*, of which 99.9% is reclaimed.

*remaining metallic parts consist of 10% mainly silicon.

Aluminium parts are polished or powder coated.

Aluminium is one of the few materials that can be recycled endlessly.

It does not lose its basic properties, which e.g. paper and plastic do.

MORE ABOUT RECLAIMED ALUMINIUM

The production of virgin aluminium from the ore bauxite is an extremely energy-intensive process. When reclaimed aluminium is used in place of virgin aluminium energy consumption is reduced by 95%. This has the additional advantage of there being no need to mine new resources from the earth's crust.

Lammhults decided at the very beginning of the Archal program to exclude virgin aluminium entirely. The aluminium used in Archal is reclaimed to 99.9% and is supplied by Stena in Älmhult. The metallic parts consist of 90% reclaimed aluminium and 10% mainly silicon. The main raw material in Archal is food and beverage cans, engine blocks, beams, etc.

ARCHAL

The aluminium parts in an Archal armchair weigh around 5 kg, equivalent to around 350 drink cans.



Examples of raw materials used in Archal.