

Paint and protect without solvents

All exterior and interior surfaces

Inspiring references



Holkham Estate, Norfolk, England.





Windowcraft expert Malin Allbäck Andersson.



Allbäck Windowcraft , Amalienborg Palace, Copenhagen, Denmark.

Bjørkeheimsstølen, Norway. Photo Helge Eek.

Contents

References	2-3
Background	4
About linseed oil products	5-1
Linseed Oil Paint	8 -10
Emulsion	1
Linseed Oil	12
Linus Wallpaint	13-16
Linseed Putty	17-18
Primer and Filler	19
Linseed Oil Wax	20-21
Linseed Soap	22
Restoring windows	23
Stove Blacking	23
Mix your own colours	24
Mixing examples	25
Paint chart Linseed Oil Paint	26-27
Paint chart Linus Wallpaint	28
Paint chart Linseed Oil Wax	29
Tools	30
Useful tips	3

Living the dream



It's been many years of hard work but we're far from disappointed. It all started back in 1982. Environmentally hazardous chemicals in textiles had made me ill. Hans was suffering health problems from the solvents in the modern alkyd paints he had to use. As sick, unemployed owners of a small business with two children to support, we were forced to find a new way of earning a living. What saved us was a job at a rural life museum with accommodation provided. gained a chance to work and to meet many old crafts-people who told us their stories and showed us how things used to be done in the past. With knowledge of our history, materials and methods, plus our own hands-on experience, the doors opened to a whole new world of craftsmanship, durability and quality.

We encapsulated it all in our dream of "a good job" – being able to work professionally without being ill and working in harmony with the laws of nature, surrounded by our family. And that's how the story of windowcraft as a profession and a return to linseed oil paints without solvents began. In 1989 architect David Pearson in London

wrote about Allbäck Windowcraft in his book Earth to Spirit under the heading "Living the Dream".

He wrote, "Respect for the lessons of the past and their integration with modern, environmentally sound, and health-conscious technology, and a new understanding of the strengths of vernacular buildings." And "It is not enough to talk, write or dream about change. Once the idea is there, it is natural to want to go further – in fact to live the dream."

He described it as "the rediscovery of ancient wisdom". Ancient European knowledge combined with modern production techniques has made it possible to develop a whole new generation of linseed oil products that meet all our requirements in terms of technical performance, eco-friend-liness, beauty and cost-effectiveness.

Sonja and Hans Allbäck



sedan 1982

Facts about our products

- Contain no solvents and must not be diluted with solvents.
- Consist of cleaned, sterilised linseed oil and natural pigments.
- One tin system the same paint for exterior and interior use and for all coats.
- Have a dry matter content of 100% and cover approximately 15-25 sq. m/litre.
- Dry in 24 hours at room temperature with good ventilation.
- Well documented in our own projects since 1982.
- Emissions tested and approved by the Swedish Work Environment Authority, the Swedish National Heritage Board and Environmental Evaluation of Building Products.

The penetrating and expanding properties of linseed oil have been used to protect buildings since time immemorial. We have chosen to follow ancient traditions and tried and tested techniques to produce user-friendly products that do not contain solvents. This approach is also in harmony with REACH – the EU's latest environmental legislation.



Paint on absorbent surfaces! One simple test to check the penetration and protective abilities of the paint/oil.

According to the Swedish National Heritage Board's statement from 2003, solvent-free linseed oil paints are recommended in building conservation.

... "linseed oil must not be taken for the service of mankind before it has been cleaned from sludge"

Gutle 1799



Advantages of protein-free linseed oil

- Shorter paint drying time
- More thorough drying
- Less risk of skin forming
- Less smell
- Better wetting capacity of the pigment and the surface
- Better penetration
- Better withstands water and weather





reds of years, so providing a wealth of experience compared with the brief history of the modern paint industry. In eighteenth- and nineteenth-century Europe, it was possible to give linseed oil paints characteristics that fulfilled all the requirements, be they technical features, drying time, storage, maintenance, beauty and cost, etc. We can do this today too if we have the knowledge.

In the past 50 years, a few paint industries in the Nordic countries have become huge businesses by manufacturing alkyd and plastic paints, accompanied by neverending advertising and marketing of new products. When a major industry attempts to approach a living material such as linseed oil on the same lines, the results are extremely varied. This has a negative impact on homeowners, which is then exploited in advertisements for the plastic and alkyd paints which they would rather sell.

is an often used term

Many of today's linseed oil paints require solvents and are classed as dangerous to the environment and to health and should therefore be avoided. The name "linseed oil paint" has today become an umbrella term for a number of different products which use linseed oil as a binding agent.

Our Linseed Oil Paint is made from Swedish, cold-pressed, cleaned, filtered, sterilised, well-matured, cooked linseed oil. The paint contains no solvents and must not be diluted with solvents. The colours are made from titanium oxide, iron oxides, chromium oxide green and ultramarine blue. Linseed Oil Paint can be painted on all dry and clean surfaces.

Our Linseed Oil Paint also covers more than twice the surface area covered by alkyd and plastic paints.



Linseed Oil Paint

For wood, steel, iron and plastic – for exterior and interior use Important questions to ask before starting work

What are you going to paint and why? Is the paint to act as protection and a wear layer or as decoration? Outdoors or in?

Once you have defined what you need, you can choose your materials. Because today there are no standardised definitions of linseed oil and linseed oil paint, there is a huge amount of confusion. There is a great need for expertise but this can be learned from the past.



The surface

Sawn, rough timber needs more paint, takes longer to paint and attracts more dirt than planed timber. The elasticity and friction in the paint means it absorbs more dirt in the initial period after application.

Gradually, as the surface becomes matt, grains of pigment slowly fall out and the surface becomes externally self-cleaning.

No pesticides

When you get dirt and mould on painted surfaces, wash them with Linseed Soap. When painting surfaces that are exposed to various kinds of mould, pure zinc paint can be added to all our paints, to a maximum of 20%. This zinc paint is marked with the "Dangerous for the environment" symbol depicting a dead tree and a dead fish. Take care with it.

Yellowing

Linseed Oil Paint yellows in dark areas or in contact with chemicals such as cleaning products with a high pH, some beauty sprays and chemical paint strippers.



First and second coat.



Linseed Oil Paint on a plastic laminate floor.

Things to think about before getting started

- When repainting, the old surface must be clean and dry.
- Max. moisture content 14%.
- Use Allbäck Linseed Soap to clean painted or unpainted surfaces
- Rinse thoroughly.
- Leave to dry.
- Avoid washing with products with a high pH.
- Existing, naturally occurring mildew must be removed from the surface before painting. Otherwise it will grow through from underneath all kinds of paint.



Stir the paint thoroughly before painting.

Things to think about when painting

- The paint covers approximately 15 − 25 sq. m. depending on the surface.
- The drying time is 20 24 hours at room temperature with good ventilation and low humidity (approx-imately 50% RH).
- Indoors with high humidity, use a dehumidifier.
- When painting on untreated, dried timber outdoors, first impregnate with raw cleaned linseed oil.
- The oil must be well absorbed by the timber.
- Heat with hot air, for example, and paint immediately.
- Remove any skin from the surface.
 Stir the paint thoroughly before painting, e.g. with a hand-held blender (see page 31). Where necessary, strain the paint through a nylon stocking to remove flakes of skin. The paint must NOT be diluted with solvents.

 Where necessary, thin with max. 5% cooked linseed oil.
- When painting interior wood, you can use one or two layers of Primer.



Heat the oil with hot air. Paint immediately.

Working with Allbäck Linseed Oil Paint

- Spread the paint well in several directions before the final long brushstroke.
- Use a stiff natural brush. Apart from shine variations, the paint should provide full coverage with one stroke.
 Paint at least two coats outdoors and at least three coats on very exposed areas.

The paint can be used in sunshine.

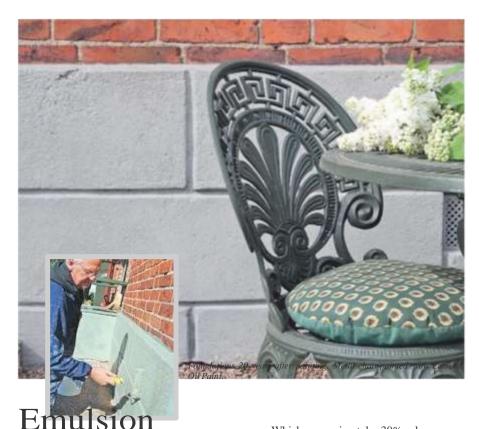
 Use Allbäck Linseed Soap to clean brushes and hands.

Miscellaneous

- Store brushes hanging in a jar of raw linseed oil (see page 30). This oil can be used for impregnation.
- The paint can be sprayed on undiluted. High pressure – small nozzle.
- Variations in shine can arise with uneven absorption or application.
 These will even out over time.
- The matt surface is the end result.
 One way of reducing variation is to impregnate with linseed oil or wipe the finished surface with linseed oil.



Spread the paint out well in several directions. Finish off following the grain of the wood.



For plastered surfaces inside and out

A water emulsion linseed oil paint is an ancient classic for plastered surfaces. e.g. kitchens, bathrooms and public spaces that suffer tough wear.

Emulsion with water makes the linseed oil paint tougher

This paint does not seal in moisture and can be used widely, e.g. on dry cellar walls, concrete floors, on plinths and stable walls.

The finish will be semi-matt and washable. Any variations in shine will even out over time.

- Whisk approximately 30% clean water into our Linseed Oil Paint with a high-speed paint whisk in a well-filled container.
- Apply with a roller, brush or spray.
- The mixture is ready when the consistency is that of yogurt.
- If water drops are squeezed out of the paint during painting, the emulsion process is incomplete.
 If this is the case, whisk in a little more paint.
- Newly plastered surfaces can be painted once the carbonation process is complete. It is best to consult your plasterer.



The raw linseed oil is ideal for impregnating

timber and making putty and soap.



The result after 30 minutes' work.

Maintenance

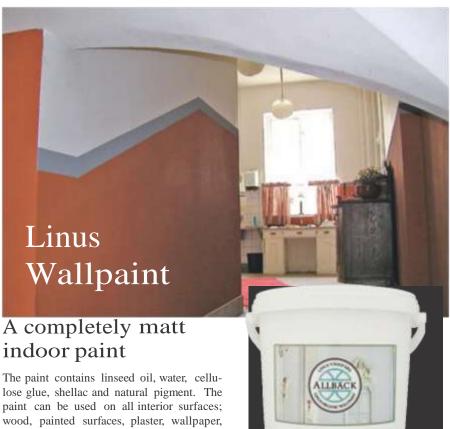
cessed to create Lin

thin Linseed Oil Paint.

Over time, Linseed Oil Paint ages visibly and gives off clear signals. After a while, depending on the direction it faces and how exposed it is, the paint starts to turn matt. After further time, the colour will "chalk", i.e. the pigment will fall out. This surface can easily be maintained by cleaning it with Linseed Soap and adding new cooked Linseed Oil or Linseed Oil Wax. The surface will regain its former function and shine.

Wax and Linus Wallpaint. It can also be used to

• Note: Risk of self-ignition in porous material. Soak cloths in water and dispose of in the general rubbish.



whitewash, plasterboard, woven surfaces and papered walls and ceilings. It produces a completely matt surface that is easy to touch up.

Linus withstands heat and is good on open fireplaces and behind stoves.

- You can easily vary the shade of the white colour by adding one of our ready-made pigment mixes.
- The surface is washable
- Linus can be spray painted (sprayed on)

Before painting

- The paint covers approximately 10m²/litre depending on the surface and the desired texture.
- Linus Wallpaint is quite thick in the tin and can be varied in a number of different ways. Therefore, it is important to decide in advance what you want the finished surface to look like and to do a test.
- On highly absorbent surfaces the paint may "chalk" after the first coat. This will disappear once you have finished painting.

Painting

- Stir in the water on the surface of the can with a whisk or by hand.
- Perlon rollers also work well on all surfaces and hold a large amount of paint. Denser rollers don't release enough paint and will leave stripes at the edges. Test the roller first.
- Test paint to ensure the desired texture. Dilute with water for a smoother surface.
- If there are stripes or more texture than you intended, let the paint dry completely and sand the surface with sandpaper. Paint again with thinner paint.
- Paint the edges of the wall first. Then paint the whole wall with a roller or brush. Paint in sections about 1 m at a time. The paint dries quite quickly so it's best to keep the room cool while painting. The roller/brush should be overflowing with paint.
- When the paint is dry, it can give off a strong smell of linseed oil. There is a large amount of oil and water that has to oxidise and evaporate. This can be irritating to the eyes.

 Make sure the room is well ventilated! The smell will go away.
- Let the first coat dry properly before painting a second, after about 24 hours.
- Sometimes the drying time for the first coat can be extended as the linseed oil in the paint reacts with the surface. Wash and dry the roller between coats or leave it in the paint for the next day. The water that is pressed out of the roller during painting will leave light marks. This also applies to paint that is not sufficiently stirred when diluting. Paint at least two coats.



After painting

- Pour new water on top of the paint in the tin and top with a tightly fitting lid.
- Store in a frost-free place. The paint will keep for many years. However, paint that has been stored for many years may need to be strained before it is as good as new.
- The paint will only be completely cured after a few weeks so be careful with wear and wiping it at the beginning.
- Rinse rollers and brushes in a bucket of soapy water. Do not pour straight down the drain. Then wash rollers and brushes thoroughly with soap in the sink. Leave the bucket containing the washing water to stand so that the paint residue sinks to the bottom. Pour out the water and dispose of the paint residue in the general rubbish.

Linus and Primer

If the surface is very absorbent, such as plaster, woven surfaces, etc., the surface can be pre-treated with Primer. Primer reduces the risk of water damage, soot and nicotine showing through.



 Linus Wallpaint used without thinning or with the addition of chalk is excellent for stencilling.

Linus as a filler

- Pour off the surface water. Do not stir the paint. It needs to be as thick as possible.
- If the paint is too thin to use as filler, add ground pumice. Use the paint to smooth joins in wallpaper and fill uneven areas. It can also be used as an undercoat on whole walls
- Leave to dry and sand.
- · Paint two coats as normal.



Paint Linus using a Perlon roller or a brush.



Masonic Lodge, Oslo, Norway. Linus Wallpaint on the ceiling and the walls.

Linus and Linseed Oil Wax for furniture

Gives a tough, washable and silky matt surface. Shellac all the knots. Paint using Linus Wall Paint to achieve desired coverage.

- Use a soft brush.
- Leave the paint to dry properly.
- Sand the surface with fine-grained sandpaper 180 220.
- Apply coloured or natural Linseed Oil Wax.
- Wipe within an hour.
- Leave to dry.
- White Linus paint should be waxed with white Colour Wax.
- The natural uncoloured wax comes out slightly yellow.

Different shades

All Linus Wallpaint colours can be mixed with each other. Linus cannot be mixed with Linseed Oil Paint.

Linus Wallpaint and yellowing

- The paint will yellow slightly if it is not exposed to light. In darker spaces, it can be a good idea to mix 10% 20% grey with white Linus paint.
- Yellow marks will appear behind pictures, furniture, etc. but these will disappear
 on their own when the surface is once
 more exposed to light. Of course, marks
 can be painted over.
- Linus Wallpaint can react chemically with certain plastic surfaces. If this is the case, the first coat will produce a stronger smell.
 After that the paint will behave as normal.

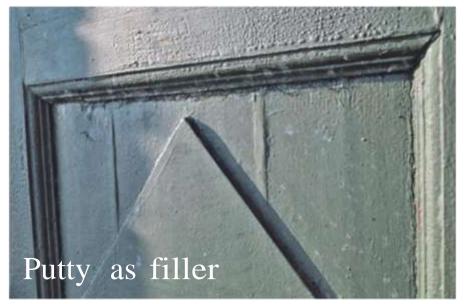


seed oil and different types of chalk and is vacuum treated. The putty can be used for windows and as a filler for interior and exterior holes and cracks.

Instructions

- Empty out the whole pot and knead the lump of putty until soft before use. This will be easier if the putty is warmed up, e.g. in a microwave or water bath or on a radiator.
- Kneaded putty can stay out on the table for several days. Left-over putty can be kept in the freezer.
- Ideally use at room temperature. If the putty is too sticky, knead it on a piece of card. If it is too hard, warm it up.
- The edges of the glass must be free from dirt, paint and putty.

- before glazing. This prevents the oil from leaching into the wood and considerably extends the lifetime of the putty.
- Make sure that the glass is carefully pinned and supported with wooden blocks to avoid movement in the putty rebates.
- Brush the glass free of oil residue with ground pumice and a soft brush.
- Paint all three coats out approximately 2 cm onto the glass.
- The putty can be painted over immediately or after about one week.
- Once the paint is dry, damp the surface of the glass with a little slightly soapy water. Cut the edges of the putty rebates to 2 mm over the glass with a steel scraper and a razor blade scraper.



20 years after a simple "delay aging" measure with Linseed Putty in cracks and overpainting old, blistered linseed oil paint.

Holes and dry cracks can be filled with putty and painted over immediately. Thinned putty consisting of a few drops of turpentine mixed into the putty can be used to temporarily seal cracked rebates, cracks and unsealed corner joints.

- Apply with a brush and dry with paper once the thinned putty goes "sticky".
- Paint immediately.
- On highly absorbent timber, linseed oil can be used to replace the turpentine.



Cut the edges of the putty rebates in slightly soapy water.



Thinned putty, a simple "delay aging" measure.



To achieve an easily sanded high finish indoors on a painted surface, mix chalk with Primer to the consistency of a thick, paintable primer.



The primer can be sanded wet or dry.

- 30 minutes. Hot air can reduce the drying time to a few minutes.
- The primer can be sanded wet or dry and hardens all the way through without troublesome cracks due to shrinking.
- The primer can be used on indoor timber and walls.

Linseed oil primer

To obtain a smooth linseed oil primer you can mix Linus Wallpaint with ground pumice to the desired consistency. The drying time is approximately 24 hours and it can be overpainted with Linseed Oil Paint or Linus Wallpaint.



The Citadel, Landskrona, Sweden. Wooden floor treated with natural Linseed Oil Wax.



Concrete tiles treated with natural Linseed Oil Wax.



White Linseed Oil Wax on a wooden floor.



The wax covers about 40 sq. m. per litre.

Linseed Oil Wax can be used on all absorbent surfaces such as matt painted surfaces, timber, concrete, brick, slate and furniture, etc.

Linseed Oil Wax contains linseed oil, beeswax and colour pigments boiled together so that the beeswax is incorporated as the linseed oil dries.

The wax gives a water-repellent silky matt surface which can be cleaned with a weak mixture of Linseed Soap and water.

The wax will be completely hardened in approximately 1 week.

The drying time may be longer for knots in the timber depending on the resin content in the knot and the thickness of the wax layer. For this reason a thin layer of wax should be applied and all **excess wax wiped off**.



Linseed Oil Wax on painted surfaces or wood.

Remember that the result of treatments with a glazing effect is affected by the absorbency of the wood and the existing paint. The wax can produce many different appearances depending on the surface. A sanded wooden floor will absorb more wax and take on more colour than a planed floor. Test first!

If less colour is desired, mix natural Linseed Oil Wax with a colour of your choice. All our Linseed Oil Waxes can be mixed with each other.



Wipe with a towel.

Instructions for floors

- Wash with Linseed Soap and suck up the water with a wet vacuum. This also applies to newly sanded floors.
- Leave to dry. To bring out the grain, sand with fine-grained sandpaper (approximately 180). Vacuum the floor.
- Apply the wax with a rough sponge.
 Work in the direction of the grain a few boards at a time. Leave the wax to be absorbed for about 15 20 minutes. Wipe off the excess with a towel within an hour.
- Waxing is complete.

It is possible to walk/touch the waxed surface immediately. Footprints can be wiped off afterwards on the way out of the room. Too much wax will produce a sticky surface with uneven shine and extend the drying time.

Note: Risk of self-ignition in porous material. Soak cloths and dispose of in the general rubbish.



The pH is approximately 9.5 undiluted.

Allbäck Linseed Soap is made from Swedish cold-pressed raw, cleaned linseed oil, without any additives or chemicals.

For normal cleaning

Dosage

 Use 100 ml soap to about a bucketful of water. Reduce the amount of water for heavy duty cleaning. In hard water areas, white flecks may appear.
 This does not affect effectiveness.

Caution!

 A soap scrubbed floor may need special cleaning, e.g. with a larger amount of water and a wet vacuum if you want to paint it with Linseed Oil Paint or treat it with Linseed Oil Wax. cannot be turned into soap and remains on the surface for extra protection.

The soap can also be used in kitchens, bathrooms, for brushes, wood/stone, plastic floors, benches, etc. (Not suitable for use in dishwashers).

- A floor treated with lye must be neutralised with acetic acid and water before treatment with Linseed Oil Paint or with Linseed Oil Wax.
- Stains on textiles: Rub the soap in with a little water and leave to stand.
 Wash in a washing machine.

Cleaning fittings

- Boil rusty fittings in 50% soap and 50% water for a few hours.
- Leave to cool overnight.
- Remove the fittings, brush clean in the water and leave to dry.
- · Ready for painting with Linseed Oil Paint.

Restoring windows

- 1. Label frames, glass and fittings when dismantling
- 2. Dismantle glass and frames. (spot heater)
- 3. Clean window fittings by boiling in linseed soap and water
- 4. Clean the edges of glass and check the condition of the glass
- 5. Remove paint (spot heater)
- 6. Repair damaged wood and sand
- 7. Exterior: Impregnate with raw, hot linseed oil or heat with hot air
- 8. Fill small cracks and corner joints with putty/thinned putty
- 9. Attach window fittings in linseed putty
- 10. Barrier layer on knots and rebates (shellac)
- 11. Glaze with Linseed Putty. Bedding putty and glazing putty
- 12. Pin glass with a glass hammer and flat pins
- 13. Insert wooden blocks with wooden pins
- 14. Paint undercoat with Allbäck solvent-free Linseed Oil Paint
- 15. Inside: Prime with Allbäck Primer/chalk. Sand
- 16. Paint with Allbäck Linseed Oil Paint, at least two coats out onto the glass
- 17. Cut the edges of the putty and polish the glass
- 18. Hang the frames inside the casing on greased hinges
- 19. Treat the casing as above where applicable.

Stove Blacking with rust protection

Stove Blacking consists of raw linseed oil and graphite powder.

- Brush off loose rust.
- Apply with a brush, cloth or sponge.
- Wipe with a soft cloth.
- And you're ready to carefully light your first fire!
- Stove Blacking can also be used as a paint.





With our 32 stock colours you can easily mix your own new shades or follow our mixing examples on page 25.





It's a good idea to use kitchen equipment such as a hand-held blender and measuring cups/jugs.

Mixing examples

NCS 3000-N White 50003 Black 50006 Antique Gold 50007	1 litre 40 ml 25 ml	NCS 0510-Y Barley White White 5000: Buttermilk 5	2 litres 2 litres 600 ml
NCS 8505-B80G Holkham Green 50011 Midnight Blue 50104 Black 50006	600 ml 1.5 litres 50 ml	NCS 2010-R80B White 50003 Black 50006 Midnight Blue 50104 Chrome Oxide Green 50603	15 litres 400 ml 550 ml 200 ml
NCS 1502-B Silver Grey 50216 Midnight Blue 50104	1 litre 25 ml	NCS 4550-Y60R Antique Gold 50007 Brick Red 50014 Black 50006	5.25 litres 1.9 litres 100 ml
NCS 2002-B White 50003 Graphite Grey 50220	6 litres 600 ml	NCS 5040-Y50R Antique Gold 50007 Brick Red 50014 Black 50006 White 50003 Iron Primer 50052	7 litres 2.1 litres 500 ml 210 ml 450 ml
NCS 0804-Y10R Vintage White 50241 Old Gold 50236	1 litre 10 ml	NCS 4010-B70G Chrome Oxide Green 50603 Linseed Blue 50105 White 50003	40 ml 400 ml 100ml
NCS 2040-Y30R Antique Gold 50007 White 50003 Brick Red 50014	1 litre 1 litre 25 ml	NCS 2010-G10Y White 50003 Chrome Oxide Green 50603 Black 50006	3 litres 400 ml 60 ml
NCS 4502-G White 50003 Black 50006 Antique Gold 50007 Chrome Oxide Green 50603	1 litre 150 ml 15 ml 30 ml	NCS 3030-G70Y White 50003 Chrome Oxide Green 50603 Antique Gold 50007	3.75 litres 1 litre 1.4 litres
NCS 8005-G50Y Holkham Green 50011 Spruce Green 50012	1 litre 1 litre	NCS 2005-Y10R White 50003 Black 50006 Antique Gold 50007	3 litres 30 ml 120 ml
NCS 5010-G30Y Wild Sage 50095 Black 50006 White 50003	6 litres 450 ml 500 ml	xide Green and ne Blue are only intend	ded as

Allbäck Linseed Oil Paint

For interior and exterior wood, metal, iron, plastic and old painted surfaces. Solvent-free. Can be painted over within 24 hours.



Note: Risk of self-ignition in porous material: Burn rags, etc., or soak in water.



Linus on walls

On all interior surfaces. 3 Litres



Linseed Oil Wax - Natural & Colour

For floors, furniture and wood panelling.



Tools

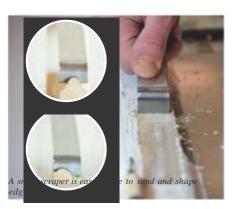
For the best result and a high finish use pure Chinese 90 tops pig bristle brushes, e.g. Gnesta.

Choose your size and model depending on the surface. Yarn-wrapped brushes are improved by replacing the yarn with electrical tape. When washing with Linseed Soap, get rid of the tape and wrap them again. The tape can be stored in the linseed oil.





Wrap the brush with electrical tape.





Useful tips



Clean fittings of paint and rust by boiling them in Linseed soap.



Mix the paint with a hand-held blender.



Spotheater for removing paint and putty.



Linus Wallpaint is best applied with a roller.



Linseed Oil Wax is applied lightly with a rough sponge, e.g. Scotch Brite.





Two-day course on Windows and Paint.



ALLBÄCK LINOLJEPRODUKTER AB

Sonja and Hans Allbäck Bjäresjö Skola, Östra Balkåkravägen 18 271 91, Ystad, Sweden Tel: + 46 (0) 411 602 02 E-mail: allback@allbackpaint.com

On our website you will find: Publications, research results, safety data sheets, emissions tests.

www.allbackpaint.com