



natural paints



LILI

what are they?

Natural, or 'eco-' paints are household paints, manufactured for interior and exterior uses, and also for floors and furniture.

All paints contain pigment (colour), binder (carrier and a 'glue' for the colour), and solvent and / or additives (aids application, after which solvent evaporates); in eco-paints these tend to be natural rather than synthetic. Synthetic ingredients tend to be by-products of the petrochemical industry.

Defining a natural paint is very difficult; manufacturers generally try to minimize the overall environmental impact of their products. When checking the can for ingredients, there is a range of environmental criteria to consider (see 'what are the benefits?') and a few pitfalls to avoid; for example, 'organic' often doesn't mean that ingredients are from plants grown without chemicals – just that they contain carbon; this is true of natural or synthetic paints and is not necessarily 'eco'. Also, natural doesn't necessarily mean non-toxic; arsenic and lead have been used widely in paint manufacture. The common paint ingredient titanium dioxide is a naturally-occurring mineral, but there are huge environmental costs involved in its mining and energy-intensive purification process.



eco-paints on doors and sash windows:
Redfield has changed from waterproof paint to eco-paints on all 200 windows on the house and stable block; only natural, breathable materials are now used – for example lime mortars and linseed oil putty instead of cement mortars or mastics.

what are the benefits?

Manufacturers of natural paints try to reduce the environmental impact of their products in the following ways:

- biodegradable ingredients
- renewable sources of ingredients
- non-toxic ingredients
- low-energy use in production
- minimization of waste products
- biodegradable / recyclable waste products
- minimization of environmentally-damaging mining or production processes

All solvents, whether natural or synthetic, contain VOCs (volatile organic compounds), which are given off when the solvent evaporates. VOCs are bad for human health when inhaled – they can be toxic and even carcinogenic; eco-paints tend to be low-VOC.

Natural paints also tend to contain a lower proportion of solvent; conventional gloss paint can be up to two-thirds solvent!

In combination with timber, stone, straw, lime, linseed oil putty and other natural materials, they form the basis of a 'natural house' – whose materials are local, natural, recyclable, breathable and not harmful to human health.

what can I do?

There are now plenty of different brands of natural paints on sale (see 'resources: suppliers') or you can make your own (see 'resources: books and courses').

Coming to a decision about the environmental costs and benefits of your paint is quite complicated; a range of factors have to be taken into consideration. Different manufacturers do better in some areas than others; for example, waste from the production of Aglaia and Auro paints is totally compostable.

Natural paints are a bit more expensive per litre, but they go much further, and save time and money on maintenance in the long run; and what price would you put on your family's health and a clean environment?

Natural paints usually have to be applied to bare wood, and so windows and doors have to be stripped back; this is a one-off though - just a light sanding is needed when re-painting in future.



Waterproof paints cause problems when they inevitably crack or flake - water gets behind the paint and can't escape, so your wood begins to rot; eco-paints laminate to the wood, so can't crack, and are breathable so any moisture can escape.

Natural paints are also available for walls, and even for kitchens and bathrooms – waterproofing is provided by natural ingredients such as linseed oil.

Go natural – don't go for uPVC windows and doors. Apart from the fact that the manufacture of plastics is an environmental horror story, uPVC will eventually become pitted and discoloured in sunlight; well-maintained wooden doors and windows will last many times longer, and can be repaired easily.

You can also purchase eco-wood waxes, varnishes, wood preservatives, and paint strippers (from LILI – see below).

resources

suppliers

- LILI (see below) supply the Aglaia range – no petrochemicals, and all waste materials compostable



Aglaia produce a range of interior and exterior paints whose waste products are totally compostable.



participants mixing and testing pigments on a recent LILI 'natural paints & lime' course.

- Auro Organic Paint - The Green Shop www.greenshop.co.uk - (01452) 770629, and Ecological Ltd, www.ecopaints.co.uk - 0845 345 7725
- Nutshell Natural Supplies, Devon: (01364) 73801
- Calch Ty-Mawr, Brecon: (01874) 658249
- Construction Resources, London: (0207) 450 2211
- Livos Natural Paints, Kent: (01795) 530130
- Ostermann & Scheiwe (Oscolor), Bucks: (01296) 481220
- Potmolen Paint, Wilts: (01985) 213960
- Eco Solutions Ltd, Somerset: (01934) 844484
- Lakeland Paints, Cumbria: (01539) 732866

books

- Lynn Edwards, 2002, *The Natural Paint Book*, available from LILI
- David Pearson, 2000, *The Gaia Natural House Book*, Gaia Publishers

courses

- LILI – natural paints & lime residential weekend course; see below for more details
- Mike Wye Associates – (01409) 281644 www.mikewye.co.uk

Contact us or visit our website to find out more about our factsheets, manuals & books, residential weekend courses, presentations and shop. You can also become a 'Friend of LILI', and receive our biannual newsletter, discounts on our courses, and help us to make a difference.

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