Briefing Note

Risky chemicals in the home and how to avoid them

Getting good information about the thousands of chemicals used in everyday products can be difficult. Outrageously, most companies won't say what chemicals they use. Of most concern are bioaccumulative chemicals which can build up inside our bodies, persistent chemicals which are slow to break down in the environment and hormone disrupting chemicals which can interfere with our bodies' hormone systems. For more details on what these terms mean, see our fact sheet: [http://www.foe.co.uk/resource/factsheets/chemicals_and_your_health.html](http://www.foe.co.uk/resource/factsheets/chemicals_and_your_health.html)

In this fact sheet you'll find a list of chemicals of particular concern and the sorts of places they turn up. You can also read our handy tips on how you can cut down your exposure, although it is impossible to completely avoid everything. In the end, it's retailers and the Government who should be protecting us against risky chemicals. See below for how you can help our campaign by demanding that retailers clean up their act. You can also help us fight for new laws to make chemicals safer - if you have internet access, visit [www.chemicalreaction.org](http://www.chemicalreaction.org) and take part in our easy online actions.

**Tips for avoiding risky chemicals**

Avoid goods made from soft PVC plastic as these can contain phthalates. For example, plastic motifs on clothes may be made from PVC and toys have been made from PVC, although by law, new teething toys should now be free from phthalates. Ask in the shop if the product you are buying contains PVC. If it does, or you are not told, try switching to another brand.

Many perfumes and products like air fresheners and cosmetics contain scents made from artificial musks. Most manufacturers keep ingredients secret, writing "parfum" on the label instead. They also contain solvents which you will breathe in. Why not cut down on scented products? Open a window instead of spraying air freshener.

Many household paints give off dangerous fumes as they dry. Water-based paints are not as bad for you, so try to use these where possible. Most paints are now marked to tell you how many VOCs (fumes) they give off - look for those marked 'low' or 'minimal' VOC content. The Association for Environment Conscious Building can provide you with information on natural and non-toxic paints. Tel: 01559 370908, web: [www.aecb.net](http://www.aecb.net)
Avoid non-essential ‘anti-bacterial’ products, which often contain chemicals such as alkyltins or triclosan (see below). It is fine to use germicides and disinfectants for treating wounds or skin problems – but we don’t think powerful anti-bacterials should be used in chopping boards or bin liners. Sensible hygiene is all that is needed.

Teflon and similar non-stick pans give off toxic fumes if they are overheated – enough to kill pet birds rather quickly. Apparently pet owners have known about this for a long time, but there are no warnings on the packaging. Better to use cast-iron or stainless steel pans.

Organic food is produced without using synthetic chemical pesticides. Organic food sales are booming and prices are coming down, so why not explore organic food options? Friends of the Earth’s ‘Real Food Book’ is available from us (contact details below). The Soil Association can give you information about local organic food delivery schemes. Tel: 0117 929 0661, web: www.soilassociation.org.uk

MDF furniture and some laminate flooring usually contains formaldehyde. This is suspected of causing cancer. If you can, avoid MDF or specify formaldehyde-free MDF.

Buy carpets made of natural materials and which do not incorporate pesticides (you will have to ask the retailer), or choose wooden flooring. Carpets can also harbour dust and dust mites and contribute to allergic attacks.

Your right to know

Friends of the Earth is also fighting for your right to know what chemicals are in the products you buy. We quizzed the larger retailers and manufacturers on chemicals our experts have listed as particularly risky. We assessed each company on what action they are taking to remove these risky chemicals from their products.

Our Shoppers Update will help you choose products from companies that are acting responsibly. In our most recent survey, the best stores (generally with respect to own-brand products) were: Ikea, Body Shop, Marks & Spencer, B&Q, Co-operative Retail, Early Learning Centre, Debenhams, Boots and Focus.

A number of companies have signed Friends of the Earth’s Safer Chemicals pledge, including those mentioned in the previous paragraph. But others, such as Asda, Superdrug, Toys ‘R’ Us and Morrisons have ignored us. Push these retailers to act by emailing their customer support: http://www.foe.co.uk/campaigns/safer_chemicals/press_for_change/league_table/

Some specific chemicals of concern

Alkyltins
Alkyltin compounds are persistent and bioaccumulative chemicals which are also known to affect hormone systems. They were also used as anti-fouling agents on ships and have destroyed many shellfish populations by wrecking their reproductive systems. They are used as anti-bacterial agents and catalysts in the production of some plastics.

Bisphenol A
Bisphenol A is used in the manufacture of linings for food cans and lids, and is the main ingredient in polycarbonate plastic bottles. It is also a hormone disrupter. Use glass feeding bottles for babies. Some tin cans have linings containing bisphenol A, and some don’t. There is currently no way consumers can tell.

Brominated flame retardants
Brominated flame retardants are a group of chemicals which are used in fabrics and plastics to counteract the spread of fires. Most brominated flame retardants are persistent and bioaccumulative, and several have been identified as hormone disrupters. Happily, alternatives are available for the majority of uses. IKEA, for example, has already phased out their use.
Phthalates
Phthalates are a group of chemicals used in many soft PVC products (e.g. vinyl floor tiles), glues and inks and as solvents in cosmetics and toiletries. Many of them are hormone disrupters. Three types of phthalate have been banned recently from children’s toys, and a further three banned from toys that might be put into children’s mouths.

Alkylphenols and their derivatives
Alkylphenol ethoxylates are used as industrial detergents and in some paints. In addition, derivatives of these chemicals are used in some plastics. Alkylphenols are hormone disrupters. There are safer alternatives available for manufacturers to use.

Artificial musks
Artificial musks are fragrances added to many products like perfumes, cosmetics and laundry detergents. They are persistent and bioaccumulative. Some artificial musks are also hormone disrupters. Friends of the Earth believes that musks are not essential and should be removed from products; we also don't support the use of natural musks, which are extracted from dead musk deer.

Triclosan
This is an anti-bacterial product increasingly found in a wide range of household goods including personal care products such as toothpaste, soaps, deodorants but also in kitchen items such as chopping boards. It is sometimes marketed under the name of “Microban”. The chemical is so long-lived that it is now being found in streams, and there is one report of it occurring in breast milk. It is not known to be harmful to humans at the moment, but the fact that babies and young infants may be exposed to it is of concern to us.

Perfluorinated chemicals
Two particular chemicals known as PFOS and PFOA are under increasing scrutiny. These are involved in stain-resisting products and non-stick products.

Summary
This is not a complete list of all toxic chemicals. Tens of thousands of chemicals are used to make household products. Very few of them have even the most simple safety data available and we do not know what the long-term consequences of exposure will be. And most articles that you buy are not labelled, or are only labelled partially. We need strong laws that will protect us and our families – and Friends of the Earth is lobbying decision-makers in the UK and across the EU for this.

Further information is available at:
www.chemicalreaction.org