



Make Your Textile Choices Greener for Your Company, Home and Store

1. Choose fabrics that are "organic fabrics" not simply fabric made from organic fibers. There is a big difference between an organic cotton T-shirt and an organic textile T-shirt. What is the difference? The fiber, organic cotton, used to make the fabric may have been raised with regard to health and safety of the planet and people; but the production of the fabric from the cotton was not. There are many steps in the production of fabric AFTER the raising or extraction of the raw fiber material. Textile production steps can include carding, retting, scouring, bleaching, spinning, weaving, dyeing, printing, and finishing. These steps use a lot of two things: chemicals and water.

Water is used at every stage in fabric manufacturing: to dissolve chemicals to be used in one step, then to wash and rinse out those same chemicals to be ready for the next step. Chemicals needed in fabric production weigh between 10% to 100% of the weight of the fabric. The production of the fabric covering your sofa required between 4 and 20 pounds of chemicals. The chemically infused effluent - saturated with dyes, de-foamers, detergents, bleach, optical brighteners, equalizers and many other chemicals - is often released into the local river, where it enters the groundwater, drinking water, the habitat of flora and fauna, and our food chain. As Gene Lisa has said, "There is not a 'no peeing' part of the swimming pool." We're all downstream.

Many of these chemicals are known to cause profound health problems in humans; when they have been tested for toxicity at all. The Toxics Release Inventory of the US EPA reports that over 25,000,000 lbs. of toxic chemicals were released by US textile mills in 1995: that's 25,000,000 lbs of just the chemicals classified as toxic by the not very aggressive US government - and those are the toxic chemicals produced in the US alone. The US textile industry is almost non-existent. Imagine what the Chinese mills are doing.

2. Search for a fabric or product that is certified by any textile certification agency. There are lots of different competing textile certifications right now, so the scene is currently confusing. But any of them - GOTS (The Global Organic Textile Standard), Blue Sign, Cradle to Cradle, Green Guard, the EU Eco-Label or Flower, Oeko-Tex - are a good choice right now. (Both GOTS and Blue Sign include fair trade and workers' rights considerations.) Any of them are a good choice because there are so few fabrics that are certified; and you're buying any one of the certifications lifts all boats right now.

3. Buy "bast" or other more eco-friendly fibers. Do look for organic textiles, but the certification is brand new, so don't expect to find much in the very near future. In the absence of a GOTS (Global Organic Textile Standard) fabric as a practical choice, pay attention to the fiber used in any textile you buy. Currently conventionally raised cotton (versus organic cotton) and synthetic fibers (those made from petroleum) are the world's most popular fibers by far. When choosing a natural fiber, try to avoid buying anything made with conventional cotton. This may be hard at his date. But, if you have a choice, linen, hemp, bamboo, abaca, wool, or any other natural fiber are good additions to the world's textile choices, and much better eco choices than conventionally raised cotton. If you must choose a synthetic fiber, insist on recycled polyester, and, best of all, in antimony free polyester. (Antimony is used in the production of most polyester, and it is an extremely toxic chemical at end of life.)

Why avoid conventionally raised cotton? Currently cotton is the world's most popular natural fiber - accounting for 80% of all natural fibers used in the world - and the world's worst environmental and health choice. The cultivation of cotton is such a thorough environmental and health disaster as to be almost unbelievable. The cultivation of cotton requires inordinate amounts of herbicides, pesticides and fungicides. Conventional cotton must be drenched with chemicals: it accounts for 25% of all the pesticides used globally.¹ And on average, in

¹ Allen, Will, "Fact Sheet on U.S. Cotton Subsidies and Cotton Production", Feb. 2004, Organic Consumers Association, www.organicconsumers.org/clothes/224subsidies.cfm

addition to this huge volume of pesticides, farmers apply seven times more chemical fertilizer on cotton crops than they do pesticides; and they use 10% of all herbicides used in the world. These chemicals pollute the groundwater, enter the food chain. Many of the chemicals used on cotton are listed among the most hazardous pollutants by the Environmental Protection Agency. Conventionally grown cotton is so full of pesticides that in California farmers can no longer legally use the leftover leaves and stems to feed their livestock. Cotton cultivation also demands vast quantities of water, resulting in soil salinization, aquifer depletion and desertification of large tracts of entire countries.

Although the cultivation of organic cotton largely solves the problems associated with the use of chemicals, organic cotton is still classified as one of the top “thirsty” crops by Oxfam, leading to the same problems of soil salinization, aquifer depletion and desertification.² But organic cotton is a better choice than conventional cotton. ***Do not buy anything made from conventionally raised cotton if you can possibly do this.*** Linen, bamboo, hemp and abaca are good additions to the world's fiber choices.

4. *Keep yourself educated on the progress of the eco-textile community.* It is small now but passionate, and much progress can be made if you support the movement. Many new techniques are possible such as using ultrasound for dyeing, thereby eliminating the use of water entirely; and drying fabrics using radio frequencies rather than ovens, saving energy. So continue to keep yourself educated. Refer to links on the Sustainable Furniture Council web-site for developments. Look for the Sustainable Furniture Council membership in furniture you buy.

5. *Demand organic textiles.* Tell manufacturers and stores what you want and will buy. Yes, it's complicated and irritating – and ecotextiles are really hard to find - and they are also more expensive right now (Mostly because of low volume but also because of the slower production speeds in production without chemicals). But eco consciousness in textiles is major progress in reclaiming our stewardship of the earth, and in preventing preventable human misery. If you, the consumer, demand or support the efforts, more progress can be made - and rapidly.

² World Wildlife Fund (www.panda.org) “Cotton: a water wasting crop.”

Textile Certifications – It’s not just the Fiber !

Version 4: March 20, 2008

Certification Name	Addresses Health & Safety Issues of the USERS of the fabric?	Environmental Management Requirements	Requires Addressing Carbon Footprint	Social Criteria
SMART	YES: 1300 chemicals required to be tracked and addressed; Also transparent (nothing proprietary or hidden in requirements or decisions); Confers multiple achievement levels as does Cradle to Cradle	YES: extensive	YES: The most stringent	YES: same as Global Reporting Initiative Standards
GOTS - The Global Organic Textile Standard	YES - both outgassing and skin absorption issues addressed	YES; Many criteria, including low levels of water contaminants - covers aquatic toxicity and all forms of toxicity; Outgassing (air pollution) handled by prohibition on VOCs	NO: Only to the extent that greenhouse gases are VOCs which are addressed	YES: Worker rights such as safe & hygienic working conditions; no child labor; "living" wage required; Trade unions allowed; no excessive work hours
Cradle to Cradle	Yes, but proprietary and “problematic” inputs not addressed – and not even identified - in two of the four levels (basic, silver, gold, platinum). This is a “proprietary” certification, so they are not wholly transparent with their criteria or basis of their decisions.	YES: extensive	YES, but not full life cycle	At two higher levels, yes. Lower levels none or useless criteria
Oeko-Tex	YES - This is its only concern. Zero concern with environmental impact or social criteria	NO	NO	NO

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Green Guard	PARTIALLY Measures outgassing only of a limited number of chemicals - not skin absorption and no environmental concerns except air pollution	NO	NO: To the extent that greenhouse gases are VOCs, yes – but no attempt at requiring even a simple look or analysis of carbon footprint, certainly not lifecycle analysis	NO
Eco Flower	Yes, decent but not stringent This certification covers many types of consumer products – Extensive use and acceptance in Europe – an early cert – low but decent baseline requirements	Yes, but weak: not stringent	Not directly- but does limit air polluting chemical use, although these are weak requirements	NO
Blue Sign: currently only in apparel	YES, but allows "grey" chemical use without transparency – that is, without specifying what those grey chemical are. This is a “proprietary” certification, so they are not wholly transparent with their criteria or basis of their decisions.	YES: addresses both air and water emissions	NO	YES, but only occupational health and safety
LEAF	Matches most progressive cert. in a category with the company seeking certification			