

## Frequently Asked Questions

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## 1. Why wool is the safest choice for bedding?

Wool, "Natures Wonder Fiber", is the most complex and versatile of all textile fibers. It is naturally resistant to flames and is considered to be the safest fiber choice for bedding. Race car drivers typically wear wool-lined suits to minimize the effects of flames in a crash and to guard themselves from fire-related injuries.

#### 2. How durable is wool fiber?

A wool fiber can be bent back on itself more than 20,000 times without breaking, compared to about 3,000 times for cotton and 2,000 times for silk. Wool can last for many years if properly maintained.

#### 3. Is wool flame resistant?

Of the normally encountered textile fibers, wool is the most flame resistant. Wool has the most complex fiber structure optimized through evolution to provide thermal protection to mammals.

#### Wool:

- is naturally flame retardant
- has low flame-spread
- has low heat release properties and low heat of combustion
- has high moisture content
- does not melt (or drip if used vertically)
- forms an insulating, cool char and selfextinguishes
- is difficult to ignite ignition temperature of 1058
   F° (570 °C)

## 4. What are the ignition temperatures of other fibers?

Ignition temperatures for:

Silk 572 F° (300 °C) Cotton 491 F° (255 °C) Polyester 905 F° (485 °C)

## 5. Am I allergic to wool?

Most medical experts say that true wool allergies are rare. A person with wool allergies has an allergic response, just like a person with an allergy to cats or pollen would have when he or she came into contact with those allergens.

It is thought that most wool allergies are actually a reaction to lanolin. Lanolin allergies are rare though and usually diagnosed at a young age.

## 6. How can wool bedding save on energy bills?

Wool keeps you warm in winter and cool in summer. Wool provides exceptional comfort as the dry warmth reduces the pain and aches associated with cold wet weather. You stay comfortable and dry all night long. Therefore, wool bedding allows most consumers to drop thermostats by several degrees during sleep time and save money on energy bills!

## 7. Where can wool also be used?

Due to its natural low flammability characteristics, wool has traditionally been the fiber of choice in many technical applications, ranging from nightwear and protective garments, to transportation and specialized military requirements. Wool is not only preferred and chosen by most hi-end designers in clothing, but also in upholstery and floor coverings.

#### 8. What does organic mean?

Organic refers to the way products are grown and processed. It includes a system of production, processing, distribution and sales that assures consumers that the products maintain the organic integrity that begins on the farm. Organic production is based on a system of farming that maintains and replenishes soil fertility without the use of toxic and persistent pesticides and fertilizers.

#### 9. What is organic bedding?

Organic bedding does not contain carcinogenic chemicals that regular bedding has. You sleep well knowing you and your family rests on chemical and toxin free bedding. Organic bedding products are also eco – friendly, biodegradable and sustainable. By using organic bedding, you can feel better about your wellbeing and know that you are helping out the environment at the same time. All-organic bedding is a great way to relieve allergy symptoms.

## 10. What are the benefits of using organic products?

- Organic agriculture protects the health of people and the planet by reducing the overall exposure to toxic chemicals from synthetic pesticides that can end up in the ground, air, water and food supply, and that are associated with health consequences, from asthma to cancer. Because organic agriculture doesn't use toxic and persistent pesticides, choosing organic products is an easy way to help protect yourself.
- It is very important for pregnant women, infants, and children to eat organic food, wear organic clothing, and sleep under organic fibers. Pesticides found in conventional food or conventional fiber can cause developmental problems, allergies and asthma.
- One can be assured of a product quality, product purity and use of fair trade practices when product is labeled organic.

## 11. What impacts the cost of organic products?

- **Economies of scale** conventional product sales substantially exceed organic product sales. The costs associated with the growing/harvesting, manufacturing and distribution of organic products are higher due to the smaller quantities. As demand for organic products increase, the growing, manufacturing and distribution costs will decrease to a point closer to conventionally grown products. Buying organic products also helps to create a market transformation in which higher demand reduces costs and provides finished goods through more mainstream sources.
- Organic farming is more labor intensive because organic farming uses mechanical and human intervention rather than pesticides for crop maintenance.

## 12. What is lanolin?

The term lanolin comes from the Latin "lana" for wool and "oleum" for oil.

Lanolin is the oil that serves as a moisturizer and acts as waterproofing for the sheep. It comes from the fleece of sheep after shearing. No harm comes to the sheep in extracting lanolin. One hundred pounds of wool yield about two to four pounds of lanolin. It is a natural and renewable raw material and not a processed synthetic compound.

## 13. Where can be lanolin used?

Lanolin found its medical use as an ingredient in a variety of products such as cosmetics, lip balms, and skin creams. Lanolin also can treat diaper rashes, rough feet and minor burns

#### 14. What fabric do you use on your products?

We use 100% certified organic cotton. Comforter fabric is woven in 300 TC sateen. Mattress pad and pillow fabric is jacquard woven. Both fabric options feel soft and comfortable on the skin.

## 15. What is a thread count?

Thread count refers to the number of threads, both lengthwise (warp) and widthwise (weft) in a one-inch square of fabric. Thread count is affected by a number of factors, including ply and thickness of the threads used. The ply of the fabric refers to how many threads are wrapped together into a single thread. Single-ply fabrics use threads on their own, while two-ply fabrics twist two pieces together into a stronger thread, as well as doubling the thread count of the fabric.

Using finer threads also allows for more thread to fit in a square inch. Finer thread often results in smoother, softer fabrics, part of the reason higher thread count fabrics are considered more desirable than fabrics with a lower thread count.

## 16. What are the care instructions for your products?

- 1<sup>st</sup> choice: Washable duvet cover is highly recommended for organic comforters and use of fitted sheet is recommended for organic mattress pads.
- **2<sup>nd</sup> choice:** Regular sunning and airing is a great way to take care of our products. The sun will naturally revitalize and disinfect the bedding.
- 3<sup>rd</sup> choice: Do not machine wash or dry. Spot clean only with soft brush and mild detergent. Allow the product to air dry completely.

Dry cleaning is not recommended because of harsh and toxic chemicals involved during the process.

Although it is possible to find specialty dry cleaners that use biodegradable and non-toxic chemical washes, most of the dry cleaners use toxic chemicals that you will bring into your sleep environment.

## 17. What is the process of making your products?

- **1. Shearing:** our sheep are usually sheared once per year during spring. The wool is trimmed in one piece, called a fleece. No sheep are harmed from shearing stage through manufacturing of bedding.
- **2. Scouring:** the fleece goes through five step washing to remove impurities, such as dirt and grease. Impurities account for between 30 and 60% of the total fleece weight.
- **3. Carding:** rollers covered with teeth tease apart the staples of wool, laying the fibers nearly parallel to form a soft rope called a sliver.
- 4. Wool filling: skilled workers prepare the bedding fabric and hand fill it with the carded wool.
- 5. Quilting
- 6. Quality Control
- 7. Packing

## 18. Where are your products made?

Our hypoallergenic products are created in our eco –friendly factory, located in Kyrgyz Republic – "The Switzerland of Central Asia".

Kyrgyzstan is a paradise for those who cannot live without mountains. There are nearly two thousand lakes that are to be remembered for the whole life with Lake Issyk-Kul being the second largest mountain lake in the world after Titicaca Lake in South America. The word "Issyk –Kul" means "Hot Lake" as it does not freeze in winter.

With the mysterious and primeval landscapes, you feel the first and the sole man on the planet, as if you were transferred through the time, and appeared at the starting point of the Earth History. You can find coniferous forests here, as well as tundra, and even "the Arctic" plateaus with unearthly landscapes, troubled only by freezing winds.

#### 19. What does hypoallergenic mean?

The term "hypoallergenic" is applied to a product in which care has been taken in ingredient selection and formulation to ensure fewest possible allergic reactions to it.

Anyone who has suffered from constant watery eyes, itchy skin, mucus filled sinuses, and sneezing knows an allergy can be disrupting and problematic. These symptoms can be caused by any number of allergens, such as pet dander, plant pollen, tree pollen, bedding, cosmetic ingredients, and foods. Fortunately, a number of manufacturers are well aware of the serious problems allergies can cause and produce hypoallergenic products, which can help decrease the severity of a person's allergic reactions.

#### 20. What are the differences between organic and regular wool?

Some of major differences between organic and regular wool growing and processing are:

- Organic Animal Husbandry farmers have a map with their land and pasture information where only a
  proportional number of sheep to land can be grazed to prevent overgrazing and its devastating effects.
- **Veterinary Treatment** animals should receive daily amount of sunlight and have freedom of movement, which increases their immune system and keeps them less vulnerable to diseases and infections. Only a certain number of synthetic antibiotics are allowed by NOP. Priority is given to natural veterinary practices.
- Organic Farm Management –use of pesticides and herbicides is prohibited on the pastures and grazing lands.
- **Independent Third Party Certification** –Overall, the whole organic wool production chain must be certified by an independent third party certification agency accredited by USDA.

## 21. What certifications do you have for organic wool?

Our entire merino wool production is certified organic according to National Organic Program of USDA, by CERES, a reputable Germany based certification party.

We are also awarded with WOOLMARK certification for our 100% pure merino wool filling. WOOLMARK is recognized throughout the whole world as a symbol of high quality and reliability and specifies that the product exceeds the global standards for pure wool filling.

Our products are tested to be completely free of arsenic, lead, and VOC's (Volatile Organic Compounds). All these carcinogenic chemicals can be found in conventional bedding. Eventually, they can cause allergies, asthma, even death, especially in young infants.

#### 22. What are the differences between merino wool and other types of wool?

Merino wool is considered to be one of the finest, softest, and purest wool fibers available in the textile market. The Merino sheep are bred predominantly for its prized wool while other types of sheep are bred primarily for meat production.

Merino wool is also famous for being light in weight and moisture absorbent, offering astounding insulating properties—a trait valued by hunters, boaters, lovers of the great outdoors, and the chronically chilly. Garments made of merino wool are highly versatile and breathable.

#### 23. How did Merino sheep develop in Kyrgyz Republic?

The Australian Merino Sheep were imported to cross-breed with Kyrgyz Merino Sheep few decades ago. Today, our Merino breed produces one of the finest, softest and purest wool fibers available in the market.

## 24. What is mulesing and do you practice it?

Mulesing is a process of removing the tail of the sheep that is affected by fly strike. This practice is very common in Australia and PETA (animal friendly organization) is now trying to stop that practice. We do not perform mulesing. Our Merino sheep graze in pesticide and herbicide free lands of the mountainous Kyrgyz Republic, where fly strike is not a concern due to more suitable weather conditions for sheep to graze and breed.

## 25. Where does your organic fabric come from?

Our organic cotton is hand planted and handpicked in southern parts of India, using under Fair Trade standards and practices.

## 26. What certifications do you have for organic cotton?

Our cotton is certified organic according to Global Organic Textile Standard by Control Union, one of the oldest and most reputable certification agencies.

It is also OEKO-TEX 100 certified, which ensures that the cotton yarns used in production are safe for children and free of harmful chemicals and substances.

## 27. What are the benefits of organic cotton?

- Organic cotton provides all the quality and texture you've come to expect from cotton products.
- Organic cotton feels good on your skin and great on your conscience.
- Organic cotton represents a return to safe and sustainable practices.
- It is grown with natural fertilizers and is free of toxic chemicals and less likely to cause allergies and asthma.
- It is eco-friendly processed that does not compromise workers' health and helps reduce water and electric use and toxic runoff, e.g. non-chlorine bleach, silicon-free softeners and low impact, azo-free dyes.
- Organic cotton is not from Genetically Modified Cottonseed.

## 28. What is a genetically modified organism (GMO)?

GMOs result from merging the genetic makeup of two organisms to create a desired byproduct that could otherwise not be found in nature. Using genetically modified seed is a common practice in conventional farming. Studies have shown that GMOs pose significant environmental risks and cause some insects, which feed on GM crops, to become resistant to pesticides.

#### 29. What are the pesticides and herbicides?

Pesticide is a chemical substance or preparation for destroying plant, fungal, or animal pests. Herbicide is a substance or preparation for killing plants, especially weeds.

#### 30. What are the eco-concerns surrounding conventional cotton?

Bed linens are made mostly from cotton. A study by Cotton Inc., an industry trade association, found that 66 percent of consumers believe cotton is safe for the environment, yet cotton is far from an eco-friendly fiber. Conventional cotton farming uses only about 3 percent of the farmland around the world, but consumes 25 percent of all chemical pesticides and fertilizers. Insects are quickly becoming resistant to recommended rates of pesticide application, and ever-increasing amounts are needed to be effective.

# 31. How many pounds of pesticides and fertilizers it takes to produce a cotton queen-sized sheet? It takes about 1.25 pounds of petroleum-based pesticides and fertilizers to produce one cotton queen-sized sheet.

#### 32. What substance is used to whiten the fabric?

Hydrogen peroxide is used to whiten the fabric. It is allowed by National Organic Program of USDA.

#### 33. What is down?

Down feathers come from the waterfowl of ducks and geese. It is their under plumage feathers commonly known as down and taken mainly from the breast region.

## 34. Is down hypoallergenic?

A high percentage of adults, teenagers, and children are allergic to down. The feathers themselves do not cause the allergic reaction. Rather, down and feathers trap dander, dust, and dirt, all of which can cause allergies to flare up.

Many down brands advertise their products as being hypo-allergenic.

- This is achieved by extensive washing, sometimes up to 15 washes, to remove the dust and odor.
- Down product is then "ozonated," a safe process that further removes impurities.
- Then it is treated with an FDA approved chemical called an "anti-microbial treatment" that basically kills
  anything else that is remaining alive. However, the FDA has approved over 2000 food additives that are
  all known carcinogens.

Down bedding may be still hypoallergenic when it arrives packaged on the store shelf, but once it is brought home and used, it will eventually revert back to harboring dust mites unless bedding is thrown out and replaced frequently.

## 35. How does wool compare to down?

Wool is naturally non-allergenic, naturally resists dust mites, moisture, mold and mildew, and is naturally flame resistant. Unlike birds who suffer or get killed in the down harvesting process, sheep grow a coat of wool and are sheared without harming anyone.

Down inherently promotes the growth of dust mites, unless it is put through extensive washing and treated with an anti-microbial chemical. Down can lose up to 90% of its isolative qualities when soaked through. So, on the whole, organic wool adds up to having a smaller ecological footprint than down. It is healthier, safer, recyclable, biodegradable, environmentally friendly, free from animal cruelty, more comfortable due to its structure and water resistance and clearly the socially conscious choice.

#### 36. Is down flame resistant?

Down and feathers are usually treated with chemical fire retardants to be fire resistant. These chemicals may be released into the air that we breathe or could be irritating to skin. Down and feathers will smolder when ignited.

## 37. Is down moisture absorbent?

The ultimate enemy of down is moisture. When wet, the thermal properties of the fiber are virtually eliminated, making it a worse insulator than most equally wet synthetic fills. Moisture trapped in down from body sweat is often unable to escape from the bedding resulting in unhealthy mould spots.

#### 38. Who are the main growers and processors of down?

China leads the world in total down supply, processing and manufacturing of finished products such as pillows and comforters. European countries such as Hungary and Poland, and North and South America are all one of the leading producers of down as well.

#### 39. How is down processed?

Down harvesting was originally a byproduct of the meat industry: birds were killed for meat and the plumage plucked off and processed. Now, demand for down feather products has created a separate and incredibly cruel industry in which birds are, in some regions, raised specifically to stuff bedding.

It is an extensive process to convert the wet, plucked, smelly plumage into a fluffy, warm, soft material.

1. Feathers are ripped from living birds, and then allowed to grow back 3 to 5 times before slaughter.

- 2. Then, they are washed thoroughly because of its strong smell.
- 3. After, feathers are normally dried in large commercial tumble dryers.
- 4. Most of the feathers are then hand sorted which must be quite a laborious and time consuming process. Sorting begins by separating each piece into categories of down, down fiber, down feathers, etc...
- 5. Dust is removed continually throughout many of these processes. It must be done thoroughly otherwise an unsatisfactory amount of dust will be left in the final process.
- 6. Finally, the different qualities of downs are blended to get the desired final products.

#### 40. How much down and feathers can be plucked from one bird?

Uup to 5 ounces of feathers and down are pulled from each bird every few weeks from the time that they are 10 weeks old until they are up to 4 years old.

#### 41. What is Foie Gras?

Foie Gras (translated literally from French as "fatty liver") is a food product made of the liver of a duck or goose that has been specially fattened. Foie Gras is produced by cruel and inhumane farming practices. At just a few months old, ducks are confined inside dark sheds and force-fed enormous amounts of food several times a day. A farm worker grabs each duck and, one by one, thrusts a metal pipe down their throats so that a mixture of corn can be forced directly into their gullets. In just a matter of weeks, the ducks become grossly overweight and their livers expand up to 10 times their normal size.

#### 42. What is "down alternative" fiber?

Polyester fiberfill is known as a "down alternative" because it mimics the loft and insulation of natural down. Consumers buy it because it is perceived to reduce allergies, plus it costs less and is easier to clean than down.

## 43. What are the differences between organic wool and synthetic fleece?

Organic wool is the logical choice over synthetic fleece since it is Mother Nature's wonder fiber. It is the perfect insulator. It is incredibly warm in winter and cool in the summer due to its ability to breathe with the skin. Wool is the most hydrophilic of all fibers and has the ability to wick away excess moisture. It can actually absorb and release moisture up to 30% of its weight without feeling clammy or wet. This is unlike synthetic fleece, which is warm but does not breathe easily. It can resist flame without the chemical treatment involved in fireproofing. Synthetic fleece is oil based, ignites easily, burns fiercely and melts. If your synthetic fleece is fire proofed, then you have the toxic fire proofing chemicals next to your skin.

### 44. Who is the biggest producer of synthetic textiles?

In 2005, approximately 53 billion pounds of polyester were produced worldwide with China being the biggest producer.

#### 45. What are the damages caused by synthetic textiles?

The synthetic fibers polyester, nylon, and acrylic are made from petrochemicals, which are non-renewable resources.

- The main ingredient in polyester's manufacture is ethylene glycol, a toxic chemical that can be absorbed into the body by inhalation and through the skin where it can damage kidneys and the central nervous system.
- The use of petrochemicals in bed linens contributes to the environmental hazards associated with petroleum and coal exploration and processing. These hazards include disruption of land and ocean habitats and pollution of water supplies.
- Polyester production requires high energy consumption, averaging 63% more energy than the production of cotton.
- Dye carriers are used to dye polyester and most of these chemicals are toxic and carcinogenic.

#### 46. What is a famous saying about sheep by Alexander the Great?

Alexander the Great had a good perspective about sheep. He said, "I am not afraid of an army of lions led by a sheep; I am afraid of an army of sheep led by a lion."

#### 47. What is NOP?

The National Organic Program (NOP) is the federal regulatory framework governing organic production, processing and its delivery in the United States.

#### 48. What is LOHAS?

LOHAS stands for Lifestyle of Health and Sustainability.

Lifestyle of Health and Sustainability is the market segment of consumers that make their choices based on eco consciousness.

Worldwatch Institute reported that the LOHAS market segment in the year 2006 was estimated at \$300 billion, approximately 30% of the U.S. consumer market; and, a study by the Natural Marketing Institute showed that in 2007, 40 million Americans were included within the LOHAS demographic.

#### 49. What is Green America?

Green America is a not-for-profit membership organization founded in 1982.

Their mission is to harness economic power—the strength of consumers, investors, businesses, and the marketplace—to create a socially just and environmentally sustainable society.

Their vision is to work for a world where all people have enough, where all communities are healthy and safe, and where the bounty of the Earth is preserved for all the generations to come.

#### 50. What are the Fair Trade Standards?

Poor countries are locked in a vicious Catch-22 situation, what has been called the "global race to the bottom" because they must use low wages, cheap natural resources and careless environmental standards to compete for foreign investment.

Fair trade is based on a business model that puts workers and the environment first, not last. Fair-trade concepts hold the promise of transforming globalization into a force that benefits the mass of humanity, not just the rich.

Fair Trade principles include:

- Fair price: Democratically organized farmer groups receive a guaranteed minimum floor price and an additional premium for certified organic products.
- Fair labor conditions: Workers on farms enjoy freedom of association, safe working conditions, and living wages. Forced child labor is strictly prohibited.
- **Community development:** farmers and farm workers invest Fair Trade premiums in social and business development projects like scholarship programs, quality improvement trainings, and organic certification.
- Environmental sustainability: Harmful agrochemicals and GMOs are strictly prohibited in favor of
  environmentally sustainable farming methods that protect farmers' health and preserve valuable
  ecosystems for future generations.

#### 51. Who are PETA?

People for the Ethical Treatment of Animals (PETA) are the largest animal rights organization in the world with more than 2 million members and supporters.

PETA focuses its attention on the four areas in which the largest numbers of animals suffer the most intensely for the longest periods of time: on factory farms, in laboratories, in the clothing trade, and in the entertainment industry. PETA works through public education, cruelty investigations, research, animal rescue, legislation, special events, celebrity involvement, and protest campaigns.

#### 52. Who are FOUR PAWS?

Four Paws is an international animal charity founded in 1988 in Austria. Today, it has offices in nine European countries. Four Paws campaign to end animal suffering and cruelty. Their vision is a world without animal suffering. They believe that every animal has a right to be treated with respect and dignity. Even during their early years the charity was very successful, closing down numerous fur farms, stopping two airlines transporting wild birds and generating awareness about the suffering of bears at tourist attractions.

#### 53. What is a dust mite?

Too small to be seen with the naked eye, a dust mite measures only about one-quarter to one-third of a millimeter. Under a microscope, they can be seen as whitish bugs. Having eight rather than six legs, mites are technically not insects but arthropods, like spiders. Dust mites thrive in temperatures of 68 (20°C) to 77 (25°C) degrees Fahrenheit and relative humidity levels of 70 percent to 80 percent. They feed chiefly on the tiny flakes of human skin that people normally shed each day. An average adult person may shed up to 1.5 grams of skin in a day; this is enough to feed 1 million dust mites!

## 54. What is a dust mite allergy?

Household dust is not a single substance but rather a mixture of many materials. Dust may contain tiny fibers shed from different kinds of fabric, as well as tiny particles of feathers, dander from pet dogs or cats, bacteria, food, plant and insect parts, and mold and fungus spores. It also contains many microscopic mites and their

waste products. These waste products, not the mites themselves, are what cause allergic reactions. Allergic reactions range from itchy noses and eyes to severe asthma attacks. Areas where people spend much time, like a bed or a favorite plush chair, are prime sites for dust mites.

## 55. What are bed bugs and bed bug allergies?

Bed bugs are small parasitic insects. The name "bed bug" is derived from the insect's preferred habitat of houses and especially beds or other areas where people sleep. They can be seen with the human eye, but do a great job at hiding. They feed on human blood preferring to do it in the dark when you're sleeping. Bed bugs love to hide in the seams of your mattress including: sofa seams, cracks in the bad frame and or head board, under chairs, couched, beds and dust covers. A number of health effects may occur due to bed bugs including skin rashes, psychological effects and allergic symptoms.

## 56. What is a carcinogen?

Carcinogens are substances and exposures that can lead to cancer.

### 57. How carcinogens are classified?

The most widely used system for classifying carcinogens comes from the IARC, the International Agency for Research on Cancer (IARC). It is a part of the World Health Organization (WHO). In the past 30 years, the IARC has evaluated the cancer-causing potential of more than 900 likely candidates, placing them into one of the following groups:

- Group 1: Carcinogenic to humans
- Group 2A: Probably carcinogenic to humans
- Group 2B: Possibly carcinogenic to humans
- Group 3: Unclassifiable as to carcinogenicity in humans
- Group 4: Probably not carcinogenic to humans

## 58. What chemicals are found in conventional bedding?

One of the main chemicals found in conventional bedding is Polyvinyl Chloride (PVC) or vinyl. This chemical is used as the surface material in nearly all conventional mattresses and home furnishing products and is considered one of the most toxic and environmentally unfriendly plastics today.

Then, there are added chemicals to the PVC surface which can include lead, cadmium, phosphorus and others. These chemicals are absorbed into the bodies and are very harmful and are found within one inch of a baby 10 or more hours a day.

Conventional bedding textiles are often treated with chemical finishes to repel water and stains, as well as to prevent wrinkles. These "permanent-press," "no-iron," "stain-proof," and "water-repellant" finishes can off gas formaldehyde.

### 59. What are the flame retardant chemicals?

Most major mattress brands treat their sleep products with hazardous and cancer-causing toxic chemicals in order to acquire the anti-flammable property necessary to withstand the two-foot thick open flame blowtorch test. The regulation does not mandate the labeling of chemicals used in fireproofing; manufactures are free to use any and all chemicals including those that have yet to be tested for hazardous side effects. Hazardous chemicals found in toxic fire retardants are boric acid (causes weight loss, vomiting, diarrhea, skin rash, anemia and convulsions), antimony (causes heart, lung, and liver damage, irritation, dermatitis, itching, and pimple eruptions), decabromodiphenyl oxide (causes hair and memory loss), vinylidene chloride (causes irritation, symptoms of drunkenness, lung congestion, liver damage, convulsions), bromine (causes blurred vision, redness, pain, severe tissue burns and eye damage), and formaldehyde.

## 60. What are the PBDE's and their side effects?

The chemicals, PBDEs, or polybrominated diphenyl ethers, are used to reduce the spread of fire in an array of plastic and foam products in homes and offices, including upholstered furniture and bedding. Researchers of the University of California, Berkeley looked at whether levels of PBDEs in women affected their fertility. The research involved 223 - most Mexican - women on low incomes living in California. The scientists found, as The Economist reports, that each tenfold increase in the blood concentration of PDBEs was linked to a 30% decrease in the probability of becoming pregnant each month. The outcome of the study presents a troubling sign as concentrations of PDBEs in humans in North America have been doubling every four to six years since the 1970s. European levels are substantially lower because of stricter regulation.

#### 61. What are the volatile organic compounds (VOC's)?

Volatile organic compounds (VOCs) are organic solvents that easily evaporate into the air. VOC's are emitted by thousands of products including paints, cleaning supplies, pesticides, building materials and furnishings and they may cause immediate and long-term health problems.

## 62. What is formaldehyde?

Formaldehyde is a flammable reactive gas belonging to the VOC (volatile organic compound) family of chemicals. It is widely used in personal care products, building materials, insulation, and home furnishings. International Agency for Research on Cancer (IARC) notes that formaldehyde, which off-gases in the home—can cause nasopharyngeal cancer, cancer of the nose and throat.

It is classified as a Class 1 carcinogen by IARC, meaning it is highly toxic to humans.

#### 63. What is antimony?

Antimony is a silvery-white metal that is found in the earth's crust. Antimony oxide is added to textiles and plastics to prevent them from catching fire. It is also used in paints, ceramics, and fireworks, and as enamels for plastics, metal, and glass. Breathing high levels of antimony for a long time can irritate your eyes and lungs and can cause heart and lung problems, stomach pain, diarrhea and vomiting.

Antimony is classified as a Class 2B carcinogen by IARC.

#### 64. What is arsenic?

Arsenic is a highly toxic and poisonous chemical element and its compounds are added to mattresses to combat microorganism growth such as mold and mildew.

Arsenic is also used in manufacturing glass and as a pesticide (rat poison!) and weed killer.

According to the EPA, "arsenic has been linked to cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate". Other side effects of consuming arsenic can include nausea, vomiting, diarrhea, partial paralysis and blindness.

It is classified as a Class 1 carcinogen by IARC, meaning it is highly toxic to humans.

## 65. Is arsenic found in sheepskin products?

Tests on New Zealand sheepskins (including new skins, used skins and skins on which babies had died of cot death) revealed that all samples tested contained significant amounts of arsenic. They also contained phosphorus and antimony and were the only bedding products of about 70 samples tested which contained all three elements.

New Zealand sheepskins sold for baby mattresses contain from 50 to 200 milligrams of arsenic per kilogram of sheepskin. The weight of a sheepskin intended for use in a baby's cot is about 1 kilogram, so that such a skin would contain 50 to 200 milligrams of arsenic.

## 66. What is lead?

Lead is a soft metal and one of the four metals that have the most damaging effects on human health. It has been used widely since 5000 BC for application in metal products, cables and pipelines, but also in paints and pesticides. It can enter the human body through uptake of food, water and air. It is classified as a Class 2A carcinogen by IARC.

Lead can cause several unwanted effects, such as:

- Disruption of the biosynthesis of hemoglobin and anemia
- A rise in blood pressure
- Kidney and damage
- Miscarriages and subtle abortions

- Disruption of nervous systems
- Declined fertility of men through sperm damage
- Diminished learning abilities of children

### 67. What is SIDS?

Sudden Infant Death Syndrome (SIDS) is the sudden, unexpected death of an apparently healthy infant remaining unexplained after an autopsy, death scene investigation, and a medical history review. SIDS continues to be one of the leading causes of infant death.

#### **SIDS Facts:**

- Each year 3,000 4,000 infants in the U.S. die of SIDS
- Infants appear healthy; death is rapid and silent, usually occurring while the baby is sleeping
- Infants between two and four months are the most frequent victims

#### 68. Is it safe to use bedding in baby's crib?

The American Academy of Pediatrics and the U.S. Consumer Product Safety Commission have made recommendations for safe bedding practices for babies. When putting infants under 12 months to sleep, remove pillows, quilts, comforters and other soft items from the crib. For further information you may contact the CPSC at www.cpsc.gov or contact your pediatrician.

## 69. What can you do as a parent to prevent toxic exposure on your children's bedding?

Typical new mattresses stuffed with conventional polyurethane foam contain pesticides, formaldehyde, and other chemical combinations, emitting harmful compounds that are absorbed into the skin and lungs. Switching to organic bedding possibly can be the best solution. Organic bedding consists of natural rubber, organic cotton and organic wool free of carcinogenic chemicals. It also provides pure natural sleep. As babies spend most of their hours sleeping, organic bedding is the most important part of a natural nursery. Sleeping on organic bedding may reduce health problems such as asthma or allergies or SIDS.

## 70. How much time do we spend sleeping?

We spend about a third of our lives sleeping, exposed to the chemical contents of our bedding, inhaling and absorbing them through our skin. Regular pillows, comforters, sheets and mattresses all may contain toxins and chemicals from pesticides. Pesticides kill fish and other water life, pollute drinking water and leave remains on the cotton. Would you want to sleep on pesticides or have your children or babies sleeping on them and breathing them?

## 71. How secure is ordering online through your web site?

All online transactions through our web site are handled with industry-standard Secure Sockets Layer (SSL) encryption. When you enter your credit card number and personal information into the order form, it is transmitted across the Internet in an encrypted (scrambled) form, and then decoded when it gets to us. This provides a secure online shopping environment for you.

