



NATUREPEDIC®



BREATHE
SAFE™

Crib Notes™

YOUR STEP-BY-STEP GUIDE TO CHOOSING
THE BEST MATTRESS FOR YOUR BABY

When They BreatheSafe™...You Can Breathe Easy

A Message From Our Founder

BARRY A. CIK.

It wasn't until I went looking to buy a crib mattress for my first grandchild that it dawned on me no one was making a mattress that I wanted my grandchild to be lying on. In fact, as I researched further, I was horrified to discover firsthand the state of the baby mattress industry. The first few years of a child's life are critical for their healthy development and as an environmental engineer I know a thing or two about chemicals – chemicals that should never, under any circumstances, be used to manufacture crib mattresses. But if they are, then the manufacturer should at least be truthful and honest about what they use, so you as a parent can make an informed decision about what to buy.

When it comes to selecting all the things you need to buy for a new baby, it's overwhelming searching through multiple websites, getting recommendations from other parents, signing up for baby registries, and doing the research to cut through all the marketing jargon to find out what really lies under the surface of a crib mattress.

That's why we have done all the legwork for you. "Crib Notes™" are designed to give you detailed, understandable information that's organized for easy reference. We've defined some of the terms you may have

heard, but may not be familiar with, and tried to demystify a lot of the conflicting information especially when it comes to organic, organic certifications, breathability, waterproofing, hygiene and allergenic materials – all the things that need to be considered when you are choosing a crib mattress.

We will update crib notes as important new legislation is passed on flame retardants, fiberglass, and PFAS (perfluorinated compounds used to waterproof crib mattresses). Manufacturers, whether they realize it or not, have a direct role in influencing non-hereditary childhood cancer. Chemicals should not be absentmindedly used throughout the manufacturing, supply chain and product formulation process – then hidden from consumers.

My goal when I started Naturepedic was to create safe and sustainable mattresses that were not only in the best interests of my grandchild, but also children everywhere. In doing so we strive to be transparent and truthful about all the materials and manufacturing processes we use and at the same time preserve the environment not only for us, but for all future generations.

Barry A. Cik, PE, CP, BCEE, QEP, CHMM, CDFE, REM, Founder and Technical Director of Naturepedic. A professionally trained board-certified environmental engineer, Barry combines his authentic passion for improving the quality of life for our children, with the technical knowledge to do so. He is an advocate for legislative reform, and was invited to testify in Washington, D.C. for a congressional subcommittee hearing exploring chemical reform. Barry frequently speaks before scientific, consumer, political and business audiences on the benefits of sustainable product design.



Breathability Done Right

BREATHE SAFE™



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BREATHABILITY

There are no set guidelines for making breathable crib mattresses, which means it's open to interpretation from one manufacturer to another, and confusing for you the consumer. To help you navigate the conflicting claims and information we will simply give you the facts.

Breathable crib mattresses can be safer for your baby, but only if they're done right. The first thing to remember is, it's your baby that must breathe, not the mattress, and that should always be the focus. A breathable crib mattress typically has a porous surface somewhere beneath the baby that your baby can breathe through should they roll over face down – an excellent safety feature that may reduce suffocation risk.

However, most "breathable" crib mattresses are not actually breathable, they're just not waterproof. They simply have a non-removable non-waterproof fabric at the surface. As well, these non-waterproof and non-removable mattress surfaces can get soiled or stained without any way to be cleaned.

Then, other breathable designs are not simply breathable just at the surface but are porous all the way through the entire mattress. And while these are indeed breathable, they introduce hygienic issues by allowing fluids to seep into the core of the mattress. They also require an ongoing washing process to try and keep the mattress hygienic. Then as well, the lengthy washing process leaves your baby with nowhere to sleep, possibly for hours.

It's important to ask the question, what is it that the baby is breathing in? Is the air inside the mattress actually safe to breathe? Unfortunately, many breathable

crib mattresses contain flame retardants, VOC off-gassing, harmful chemicals and are susceptible to mold, mildew, and other microbial growth. With our Naturepedic BreatheSafe™ crib mattresses you get ORGANIC and BREATHABLE! The Naturepedic well-designed safer breathable crib mattresses surround the baby with more airflow. As well, this helps dissipate heat and moisture for less sweaty backs and better sleep.

A Practical Approach to Breathability

At Naturepedic we engineered a simple and practical solution. Instead of making the whole crib mattress porous, we developed a breathable layer that is porous at the surface, allows breathable air to flow freely between the baby and the mattress, and is removable and machine washable. The best part is that under the breathable layer, you get a fully functional [waterproof and non-toxic crib mattress](#). This means you get all of the functionality you would expect from a quality crib mattress including edge support, firm construction, 2-stage firmness and organic certification. If the mattress underneath the breathable layer gets soiled, you can just wipe it clean (like you've always done with a waterproof crib mattress.) Or if the breathable layer is in the wash, you can either replace it with a spare breathable layer or just use the underlying mattress (like traditional crib mattresses have always been used.)



BREATHABILITY

Is the "Layer" Approach Just as Breathable?

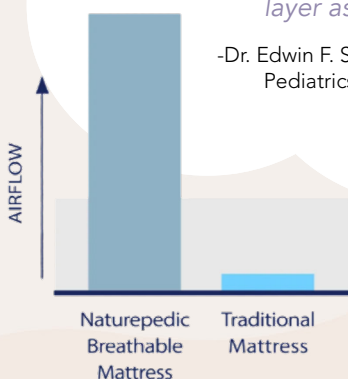
You don't have to take our word for it, we put it to the test at one of the leading industry testing labs which developed a "suffocation test" where mattresses get graded on how breathable they are. The test uses a simulated baby positioned face down and air is blown in and out of its mouth to simulate breathing. The suffocation test was done on the Naturepedic breathable crib mattress models and was compared to other designs.

The Results Show:

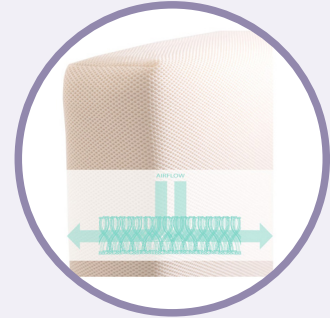
1. The Naturepedic breathable layer design scores in the lowest (i.e. best) suffocation risk category.
2. There is NO additional breathability benefit to making the ENTIRE mattress breathable. (And as we said earlier, making the entire mattress porous and breathable only introduces the growth of contaminants and hygienic issues.) The simulated baby can breathe face down through the Naturepedic breathable layer indefinitely! With no additional benefit to making the mattress completely porous, why risk unnecessary hygienic issues and make cleaning difficult?

"The data clearly shows that Naturepedic crib mattresses with a breathable cover are five (5) times below the threshold of what is considered suffocation risk under the worst possible scenarios... it is not prudent to remove the waterproofing from a crib mattress as that only creates non-hygienic conditions... a safer approach is to keep the mattress hygienic and to add a breathable layer as is done with Naturepedic."

-Dr. Edwin F. Simpson, MD FAAP, Assistant Professor of Pediatrics, Hofstra-NSLIJ School of Medicine



Testing conducted by Intertek, an independent third party laboratory.



How It Works

The breathable cover layer is 3-dimensional, allowing air to flow through the cover layer and under the baby for 360° air circulation. Since air is able to pass freely through the cover's 3D structure, babies can breathe right through it!



Practical Design

The breathable function is encapsulated in a washable cover that completely hugs the mattress. In the event of an accident, simply replace with a spare cover or put the baby back to sleep on the fully functional underlying mattress. The cover can then be machine washed and dried at your convenience.

WATERPROOFING / HYGIENIC / WASHABLE

Babies make messes, that's a fact. Knowing that, why would anyone make a crib mattress and not make it waterproof? That's a question you should be asking. So, let's explain the importance of waterproofing and hygiene when it comes to breathable crib mattresses.

Breathable and waterproof are counter concepts to each other. The conundrum that exists is twofold. First, in order to be organic or non-toxic, some crib mattress manufacturers simply opt not to waterproof because most waterproofing techniques rely on toxic chemicals. But that's just exchanging one problem for another. Babies have accidents all the time – urine, bigger messes, drool, vomit, spilled milk, and more. If your baby's crib mattress isn't waterproof, these messes will seep into the surface fabrics. And, [if that mattress is breathable](#), then these contaminants can make their way into the mattress' interior, where they can grow mold, bacteria, and other microbes that your baby can breathe in. Not exactly the kind of breathability you had in mind!

Second, there are other manufacturers that add a waterproof cover on top of their porous breathable crib mattress, basically negating the breathability feature.



Rundown of Waterproofing Methods

Considering your baby sleeps up to 16 hours a day, chemicals in crib mattresses matter. Here's what you need to know:

Vinyl: The majority of waterproof crib mattresses use vinyl, which is made with toxic phthalate plasticizers. The trouble is that [phthalates](#), some which are already known animal carcinogens, and some which have already been banned in children's products, don't stick very well to the vinyl and they off-gas into the air, and your baby can breathe in these chemicals (more information in the next section.)

Perfluorinated compounds: Another common waterproofing method uses perfluorinated compounds, including the polyfluoroalkyl substances (PFAS) you may have seen in the news lately. Some states are starting to take [legal action against the use of PFAS](#) in products (and disposable food packaging.) Why? Because PFAS have been linked to a growing number of health concerns (more information in the next section.)



WATERPROOFING/HYGIENIC/WASHABLE

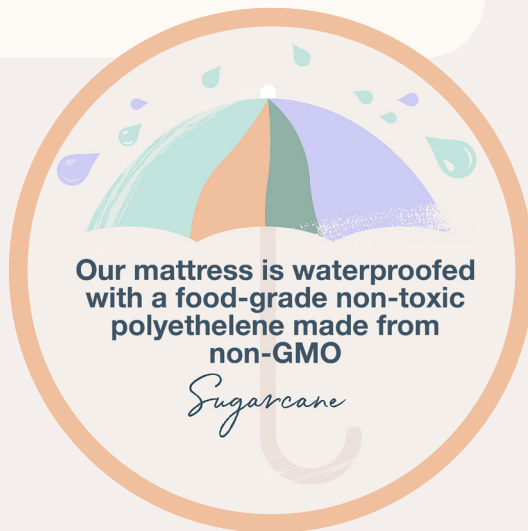
Rundown of Waterproofing Methods (cont.)

Polyurethane - Not the foam: This one can be a little tricky! Polyurethane is not the same thing as polyurethane foam (or memory foam), which is a petroleum-based material that off-gases harmful chemicals. Polyurethane is actually a better option than phthalates or PFAS. However, when polyurethane is used to waterproof a crib mattress, it's usually incorporated just beneath the "ticking," which is the mattress's outer-most surface material. This leaves the surface without any waterproofing (unless some PFAS is also added at the surface), which means it can collect leaks and grow contamination.

Waterproofing done right: Innovation is key to how we do things at Naturepedic. We refuse to compromise on certified organic crib mattresses, so we had to get very inventive and find something that's excellent waterproofing and also meets the strict GOTS standards for organic mattresses! This is why we waterproof our crib mattresses with a surface made of food-grade polyethylene made from non-GMO sugarcane. It's approved by GOTS and MADE SAFE and preferred by Clean Production Action/GreenScreen.

We meet the highest breathability standards on the market without compromising on hygienic safety. Our [breathable, waterproof baby crib mattresses](#) feature a breathable cover, providing an extra layer of airflow between the baby and the crib mattress, which can easily be removed, washed, dried, and kept clean. The underlying mattress is waterproof at the surface, to help keep the mattress core free of microbial contamination. This way when accidents happen, the surface can be easily wiped clean. In addition to providing the extra breathability, all Naturepedic mattresses are certified organic and non-toxic.

The bottom line? A breathable crib mattress should also be waterproof, easy to clean, and prevent messes from seeping into the core of the mattress. With our BreatheSafe™ breathable mattress design, you can rest easy knowing that your baby will have an extra layer of breathable air when they're lying face down on the crib mattress.



DITCH THE CHEMICALS AND ALLERGENIC MATERIALS

Numerous studies have consistently shown that eliminating toxic chemicals from babies' surroundings is critical for their healthy development. Sadly, there are a lot of chemicals. Currently, over 85,000 chemicals are used in the U.S., most of which have not been adequately tested for their effects on human health. On average, only 10-15 chemicals are tested by the government per year. While, recently, there has been progress in banning certain chemicals, manufacturers often tweak the formulas to come up with new chemicals that may be just as bad but technically legal – this is called “regrettable substitution”. Let’s look at some of the chemicals commonly used in crib mattresses.

Phthalates: (pronounced tha-layts) are plasticizers. They are typically used in crib mattresses to help achieve their waterproofing properties. This makes crib mattresses with vinyl surfaces one of the largest sources of phthalate exposure to babies, especially as these chemicals can off-gas into the air that the baby breathes. This is particularly concerning as phthalates have been linked to [serious developmental issues](#) including learning, attention, and behavioral disorders. Also, prenatal exposures to phthalates can contribute to attention problems in children.

PFAS: Known as perfluorinated compounds, [PFAS are a large group of synthetic chemicals](#) used in everyday materials, especially crib mattresses, again for their waterproofing properties. PFAS are called “forever chemicals” because they don’t degrade in nature. Studies are increasingly linking PFAS to serious health concerns, including kidney cancer, lowered birth weights, and effects on the immune system.



DITCH THE CHEMICALS AND ALLERGENIC MATERIALS

Antimony: A flame retardant that in crib mattresses has been linked to SIDS (Sudden Infant Death Syndrome.) While now not normally used in a crib mattress, it's still been found in some brands. Synthetic fabrics, furniture foams, and fillings (including poly-fill type products) not treated with flame-retardants either test negative for Antimony or test positive for trace levels of Antimony (with Antimony levels typically found to be under 100 ppm in modern untreated mattresses and bedding made of synthetic elements.) Antimony at levels as high as 1,185 parts per million (ppm) has been found in some crib mattresses. Antimony at this level is only present when a mattress has been treated with chemical flame-retardants that contain intentionally added antimony as part of the flame-retardant mixture.

Flame retardants have been linked to:

- Neurological impairments
- Hormone disruption
- Decreased fertility
- Cancer

Fiberglass: This is now being used as a replacement for harmful chemical flame retardants in some mattresses, according to a new [study](#). But it can also pose its own risks. The researchers found that you could be exposed to inhalable fiberglass fragments from your mattress covers but would be unaware of this hidden hazard in your bedroom. If mattress covers are removed or damaged, the fiberglass fragments can escape into the air, creating a potential inhalation hazard and skin and eye irritation. If inhaled, fiberglass can irritate or damage the lungs, and cause other harm. While crib mattresses have to pass relatively strict flammability tests, there's no requirement that flame retardants must actually be used. What the government requires is that flammability standards be met, and it's up to the manufacturers to decide how they want to meet those standards. Naturepedic mattresses easily meet all fire safety standards without any flame retardant chemicals or flame barriers whatsoever because Naturepedic doesn't use highly flammable materials or components to begin with.

Allergenic Materials

When a baby is born, we don't know what they are allergic to. So why would one of the most important items we can buy for them, be filled with a severely allergenic material like latex?

Nowadays, many crib mattresses use certified organic latex to replace other [questionable materials commonly used](#), like polyurethane foam. While this may solve one (very important) problem, it trades it for another.

Unfortunately, latex, even if it's organic latex, can be allergenic. In fact, natural latex/rubber has been associated with high allergies. The FDA has also reported that natural latex made from rubber sap is allergenic and can even cause anaphylaxis.

Ditch The Chemicals

The bottom line is that baby products don't need to be made with these chemicals. At Naturepedic, we have proven that you can make products without toxic chemicals and materials like formaldehyde, pesticides, GMOs, glues, and adhesives, and we're advocating to change the larger system and stop the cycle of introducing them into our homes and harming our families. By choosing a certified organic crib mattress, exposure to these questionable chemicals can be avoided. This is especially important if you're buying a breathable crib mattress. Remember, if the baby can breathe through the entire mattress, and if chemicals of concern are being used, it begs the question – [what exactly is the baby breathing in?](#)



WHY ORGANIC / GOING ABOVE AND BEYOND / CERTIFICATIONS

We are truly committed to the organic, healthy sleep movement that we helped to create back in 2003 when we introduced our first crib mattress. Organic is a vision for working and living in harmony with nature, building a better future for us all – especially our children.

Being certified organic means we are held accountable for maintaining environmentally conscious, ethical, and sustainable business practices, as well as meeting and exceeding the standards required for organic certifications. Not only do we source the finest naturally nontoxic and 100% certified organic materials, but our manufacturing facilities are also GOTS (Global Organic Textile Standard) Certified.* **What this means is, you can trust that what we say is what we do.**

Setting standards for others to follow has raised the bar in the mattress industry. Organic sleep options are no longer an afterthought, organic is becoming the first box to check when buying a crib mattress. We are proud to be a part of improving the health and wellbeing of the next generation.

We began making organic crib mattresses out of necessity, but it soon became our mission to make safer, healthier sleep available to everyone and in doing so Naturepedic has been leading the way as:

- The first mattress brand in the world to be MADE SAFE certified – non-toxic and safe for us and our planet.
- The first to make our own mattresses in our own GOTS certified factory
- The first to eliminate all glues and adhesives from our manufacturing process
- The first to make naturally safer mattresses without harmful chemicals and flame retardants
- The first certified non-food organic product to complete the Fraud Protection Plan for the OTA (Organic Trade Association)
- The first mattress brand to join the Health Product Declaration® (HPD) Collaborative in support of promoting product transparency and material health

OUR COMMITMENT TO THE PLANET

We use natural resources from our planet and so we need to give back. We do that each year, by donating 1% of our gross revenues from every product we sell to environmental nonprofits as a business member of 1% for the Planet.



Certified organic cotton

Fill & Fabric

*Many brands will display the GOTS scope certificates or organic transaction certificates of their suppliers, which supposedly means that the referenced organic material is in the product that you bought. However, what this really means is that the product that you bought is not certified organic at all. If the product that you bought was certified organic, then the scope certificate and transaction certificates would be addressed to the manufacturer of your product and not to a supposed supplier of the manufacturer that made your product. To find out if the manufacturer of your product is GOTS certified organic, go to www.global-standard.org and then to Certified Suppliers Database and then enter the name of the manufacturer of your product in the "Free Text".

WHY ORGANIC/GOING ABOVE AND BEYOND/CERTIFICATIONS

At Naturepedic, we created a line of [breathable crib mattresses](#) that check all the boxes. In fact, Naturepedic is the only manufacturer that provides:

Breathable + Waterproof + Certified Organic

If you are looking for a breathable crib mattress, here's what you need to check for:



CERTIFIED ORGANIC

Meets the highest GOTS organic standard



NO FIBERGLASS

Or other flame retardant substitutes



BREATHABLE

Reduces suffocation risk



NO FLAME RETARDANTS

Meets all government flammability standards



WATERPROOF

Easy-to-clean



NO LATEX

Avoids the allergenic risk of latex for babies



HYGIENIC

No fluids reach inside the mattress + machine washable breathable layer



CERTIFIED NON-TOXIC

Certified by MADE SAFE in addition to GOTS



Our range of [GOTS-certified](#), [MADE SAFE certified](#) and [GREENGUARD GOLD certified breathable crib mattresses](#) are all about creating a safer and more comfortable sleeping environment for your baby and giving you peace of mind.

WHY ORGANIC/GOING ABOVE AND BEYOND/CERTIFICATIONS



Certified Mattresses & Bedding
 Naturepedic organic products meet the organic and non-toxic standards of the Global Organic Textile Standard (GOTS). U.S. Department of Agriculture (USDA) recognizes GOTS as the standard for organic consumer goods.



Certified Non-Toxic
 MADE SAFE certifies products made with ingredients not known or suspected to cause human health harm. The materials used by Naturepedic have been scrutinized by scientists and experts to ensure they do not contain harmful ingredients or release vapors, gases, or by-products that could impact human health.



Tested for Chemical Emissions
 UL/GREENGUARD is a third-party certification program that tests for chemical emissions from consumer products and materials. All Naturepedic products are certified to the UL/GREENGUARD Gold Certification as well as the UL formaldehyde-free standard.

Also, be sure to check for industry reports, like [The Healthy Pregnancy Guide](#) and [Peeling Back the Green Façade](#). Often, these will contain compelling research and information on brands, gathered by third-party sources. At Naturepedic, we're proud to meet and exceed the most stringent **third-party certifications on the market** by:



Placing #1 in transparency and material safety tests in the investigative [The Mattress Still Matters Report](#)



Being named leaders in safer chemical alternatives in [Clean Production Action's Chemical Footprint Report](#)



Becoming the first certified non-food organic product to complete the [Organic Fraud Prevention Plan for the Organic Trade Association](#)



WHAT OTHERS HAVE TO SAY:

Experts

"Naturepedic's Caring for the Environment Inside Out program aims to reduce harmful chemical exposure for both people and the planet. The company is a trustworthy leader in the use of organic materials and the avoidance of toxic ones."

– Good Housekeeping Institute Experts

"At the Helen R. Walton Children's Enrichment Center, we put children first in everything we do. ... We are proud partners with Naturepedic, a non-toxic and organic mattress manufacturer dedicated to providing parents with a better alternative for their children. Naturepedic puts the health and well-being of children first and supports families as they seek a healthy lifestyle."

– Kristen Herbert; Director, Helen R. Walton Children's Enrichment Center

"For families, the greatest power they have to protect their child is to not buy products containing chemicals known to be toxic to their child and do extensive research into chemicals deemed "safe." One way to make sure that your children are protected is to strive to only buy organic products, which eliminates exposure to toxic chemicals that can negatively affect their health. The best protective stride that you can make is choosing to buy Naturepedic certified-organic mattresses and bedding that is free of any toxic chemicals that can hurt your child's developing mind."

– Dr. Arthur Lavin M.D., FAAP; Fellow of the American Association of Pediatrician; Co-chair, Doctors Organized for Health Care Solutions (DOHCS)

"We put a lot of emphasis on the physical protection of our children with the use of car seats, safe toys and the recommendation to have babies sleep on their backs. We need to place similar emphasis on protection our children from the subtle but potentially serious consequences of exposure to toxic chemicals. ... I recommend using a non-toxic and more natural mattress for all infants and toddlers, and I can recommend Naturepedic as an excellent product from people who care about the health of our children."

– Sigmund C. Norr, Ph.D., M.D.; Former Chief of Pediatric and Adolescent Medicine, Kaiser Permanente

WHAT OTHERS HAVE TO SAY: *Environmental Groups*

"Having lost my child to cancer which I believe was caused by environmental toxicants, I have made myself aware of the importance of environmentally safe products. I've been working with Naturepedic for many years now and their expertise, integrity and insistence on creating a quality product that is healthy for children is beyond compare... I have the utmost respect for all you and your company do to protect children and make our planet a better place to live."

- Tessa Hill, President, Kids for Saving Earth

"Naturepedic is committed to protecting the personal sleep environment of its customers by producing products specifically designed to reduce their exposure to harmful chemicals and, through their sourcing of organic materials, protecting the Earth as well."

**- Helen Conroy, Partnership Director,
Documenting Hope Project**

"Naturepedic makes safe non-toxic mattresses for the entire family – no flame retardants, organic. They think about our family and keep our family safe while we sleep at night. We, at Healthy Child, really believe what they're doing to protect our families."

- Nancy and Jim Chuda, Healthy Child Healthy World

"Naturepedic set the bar high for a reason, so everyone will be safe from harmful chemicals while they sleep. It's no coincidence that with toxic chemicals continuing to go unchecked, incidences of childhood cancer continue to rise. The commitment that Naturepedic has to safe, organic sleep is unrivaled. From supply chain through manufacturing and delivery, every step of the way they employ strict protocols so consumers can trust that their children and the planet are protected."

- Anne Robertson, Toxic Free Future For Our Children

WHAT OTHERS HAVE TO SAY:

Customers

"No complaints! Baby sleeps better than ever on this mattress, definitely helped solve some of his sleep issues."

- Connor

"After months of research and comparison with other companies' products, we placed our order and are SO pleased with our decision!!! I contacted customer service prior to our purchase with some questions about what was the best fit for us, and they were very helpful and friendly. We received our mattress quickly and it was well-packaged. We tested out the waterproof coating with some water and it worked beautifully! We ended up going with the mattress which had the breathable cover and we are very happy with our decision! Thank you, Naturepedic, for making a clean mattress for our precious little ones!"

- Adam

"The quality of this mattress is incredible. I love that the infant and toddler sides are clearly labeled. I love how easy it is to maneuver when I have to change sheets. And I love that I can have peace of mind knowing that these materials are good for my baby."

- April

"We just had our third baby and I have loved our previous Naturepedic crib mattresses, we know we were going to get for our third and we still love them! Also, Naturepedic has the best customer service! Would recommend!"

- Ashley

Myths & Misunderstandings

SURROUNDING BREATHABILITY

Myth



Misunderstanding

- That your baby has to be able to breathe through the entire mattress – they do not. What they do need is a clean, hygienic airflow so if they roll over onto their stomach, they can freely breathe clean air.
 - That organic is the same as certified organic – it's not, if it's not certified you have no guarantee that it's organic.
 - That water-resistant is as good as waterproof – it's not, there's a big difference, only waterproofing can ensure that the mattress is hygienic. Make sure the waterproofing materials used are non-toxic.
 - That organic latex is fine for crib mattresses – it is not. Latex, even if it's certified organic, can still be highly allergenic for babies and children. Natural latex contains certain proteins that are more allergenic than even synthetic latex.
 - That "green" and "eco-friendly" mean something. They do not. Without certifications to back up these words, they are meaningless and brands that use them are "greenwashing". Greenwashing has become increasingly more prevalent as the demand for sustainable and environmentally conscious products has grown.
- Some companies say that you don't need a waterproof mattress protector for the first year of your baby's life because the messes are not that big. Really, we've seen some pretty big messes from some very tiny babies! It's misleading to say "No, you don't need a mattress protector at all". You need a waterproof mattress, and a mattress protector is very helpful.
 - When brands claim that they have a washable mattress from cover to core just consider that while the whole mattress may be washable, you can't put it in the washer/dryer so it must be washed in the bathtub, and can take many hours to dry! Where does baby sleep now?
 - That crib mattresses need to be treated with a chemical flame retardant. That is not the case. Yes, the government requires that flammability standards are met, but it's up to the manufacturer how they meet those standards. So, no it's totally unnecessary to use flame retardant chemicals or flame barriers, especially if highly flammable materials are not used in the manufacturing of crib mattresses.
 - When brands use polyurethane to waterproof a crib mattress, it's usually incorporated just beneath the "ticking," which is the mattress's outer-most surface material. That means the actual surface has no waterproofing whatsoever (unless waterproofing PFAS chemicals are added at the surface). This allows for leaks, contamination, and a breeding ground for germs and bacteria. Not something you want your little one seeping on.

Myths & Misunderstandings

SURROUNDING BREATHABILITY

MISLEADING CLAIMS FROM OTHER BRANDS, AND WHAT THEY'RE REALLY SAYING

CLAIM

WHAT THEY'RE REALLY SAYING

Misleading, Frivolous Language

There are no rigorous standards surrounding a company's ability to use marketing claims like "all-natural," "eco-friendly," "hypoallergenic," and/or "safe." These words are frequently ambiguous and worthless, and sometimes they refer to only one part of a product rather than the integrity of the whole item. Words like these are intentionally vague; for instance, a company might call its crib mattress "safe" because it is firm, but neglect to ensure that it is non-toxic.



"We have no proof of anything we claim"

Meaningless Logos

Don't fall for logos that are placed on packaging to look like certifications, this is a typical greenwashing tactic.



"We have no certifications, so we'll fake them"



The Bait and Switch

When a non-organic crib mattress brand makes comments, like organic mattresses are usually not completely organic and have hidden dangers.



"We don't have certified organic mattresses, so we are going to use scare tactics and trash talk"

Glossary

2-Stage Firmness - A mattress that is tailored for a baby's needs and features a firmer side for infants and a cushion firm side for toddlers.

Allergenic - Having the capacity to induce allergy.

Antimony - Antimony is a naturally occurring metal often used in combination with lead and zinc, found in metal alloys, paints, ceramics, and fireworks. It is also used as a catalyst to produce polyester and is found in plastics used for disposable beverage bottles. The most widely used antimony compound is antimony trioxide, used as a component in flame retardant applications. Antimony trioxide is classified as a carcinogen in the state of California. It has also been listed as a possible human carcinogen by the International Agency for Research on Cancer.

Clean Production Action's Chemical Footprint Report - [The Chemical Footprint Project Survey](#) evaluates responders' chemicals management systems against best practices to measure and reduce chemical footprints.

Certifications - The FTC is becoming more vigilant against deceptive green labeling practices, but they won't catch all offenders. So why certification? So you know what you're getting. Certifications can be for entire mattresses, but certification can also be for individual components. Independent, legitimate organic certification lets you understand exactly what you're getting, and not what a company wants you to think you're getting.

Certified Organic - Verifies that farms or handling facilities and consumer product manufacturers comply with the organic regulations and allows producers to sell, label, and represent their products as organic.

Clean Production Action/Green Screen - Globally recognized tool designed to assess and benchmark chemicals based on hazard. Companies and governments use GreenScreen benchmark scores to identify chemicals of concern to human health and the environment, select safer alternatives and track and communicate their progress.

Endocrine Disruptors (Hormonally Active Agents) - Chemicals that can interfere with the endocrine systems. These disruptions can cause cancerous tumors, birth defects, and other developmental disorders.

Environmental Toxicants - Cancer-causing chemicals and endocrine disruptors, both human-made and naturally occurring, that can harm our health by disrupting sensitive biological systems.

FDA (Food and Drug Administration) - The federal agency called the Department of Health and Human Services. They are responsible for protecting and promoting public health through the control and supervision of food safety, tobacco products, dietary supplements, prescriptions, and over the counter pharmaceutical drugs and medications, vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), cosmetics, animal foods, and veterinary products.

Fiberglass - Fiberglass is now being used as a replacement for harmful chemical flame retardants in some mattresses. But it can also pose its own risks. Recent changes to some states' flammability standards mean manufacturers can meet requirements without using toxic chemical additives. But if mattress covers are removed or damaged, the fiberglass fragments can escape into the air, creating a potential inhalation hazard and skin and eye irritation.

Flame Retardants - Chemicals that are added to building materials, electronics, and furniture (like mattresses) with the intention of preventing or slowing fires. Flame retardants are linked to neurological impairments, hormone disruption, decreased fertility, and cancer. If humans are exposed to these toxic chemicals over time, they have been shown to bioaccumulate, which could potentially cause certain chronic health problems.

Food-Grade Polyethylene - A type of plastic that is widely used in the food packaging industry. It does not need additional chemical additives like phthalate plasticizers used to make PVC into flexible vinyl. It is a safer plastic option. Naturepedic uses food-grade non-toxic polyethelene made from non-GMO sugarcane.

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Forever Chemicals - Term used for PFAS chemicals. These chemicals do not break down in the environment and have been widely used since the 1940s in a huge range of everyday consumer products and industrial processes.

GOLS (Global Organic Latex Standard) - Standards for latex goods made from 100 percent organic latex. This means the latex is harvested from rubber trees at certified organic plantations that don't use chemical pesticides.

GOTS (Global Organic Textile Standard) - Recognized as the world's leading processing standard for products made with organic fibers. It defines high level environmental and non-toxic criteria along the entire organic textile and non-textile supply chain.

Greenguard Gold - Certification standard that includes lower total VOC emissions levels to help ensure that products are acceptable for use in most environments.

Greenwashing – Refers to companies that make false or misleading claims about how environmentally friendly their products, services, or business practices are. Taking its name from whitewashing – a deliberate attempt to cover up incriminating details – greenwashing can include Advertising, Public Relations campaigns, Rebranding, Mission and vision statements, Packaging, and Alleged partnerships. Greenwashing can take any form of corporate communication. Greenwashing can also mean not communicating, as in withholding information that reflects poorly on a company.

Hormone Disruption - The disruption of the endocrine system. Certain chemicals mimic natural hormones, fooling the body into over-responding or responding at inappropriate times.

MADE SAFE - A non-toxic seal for products that you use every day at home. They certify products made with ingredients that are safer for human health.

Natural Latex - "Natural" Latex is not legally defined but is generally a mix of latex made from rubber tree sap and synthetic latex made from petrochemicals. It is used in the manufacturing of natural latex mattresses,

beauty application pads, and cushioning. The problem is "natural" is not defined by the FTC, meaning a "natural" mattress could contain almost anything.

Non-Toxic - Free of toxic chemicals that may render the product injurious to health. "Non-toxic" is not defined by the government or laws, but is defined by various certification programs.

Off-Gassing - The release of volatile organic compounds that were formerly inside in a product.

Organic – Organic mattresses are made from premium materials like organic cotton, organic wool, and/or organic latex, which are harvested and processed without harmful chemicals so you can experience a cleaner, healthier, safer sleep. For a product to be considered "organic" it should meet the requirements and be certified to the Global Organic Textile Standard (GOTS), or the Global Organic Latex Standard (GOLS) or the Organic Content Standard (OCS).

Organic Certification - Organic certification verifies that certified organic products meet all requirements in the USDA organic standards and/or standards like GOTS, GOLS, and OCS. These organic standards specify which substances are allowed or prohibited. They also specify production or processing requirements, such as conserving natural resources and preventing commingling with non-organic products. They also specify which substances are allowed and prohibited.

Organic Fraud Prevention Plan for the Organic Trade Association - Addresses organic fraud that can be taking place on several fronts ranging from farm bill priorities to major private-sector initiatives. Naturepedic was the first non-food company to complete this plan.

Organic Latex - Made from the sap of the rubber tree which is processed into latex. Organic latex has various processing and additive requirements.

Peeling Back the Green Façade - This is a report that provides information about claims brands make about the qualities of the crib mattresses they sell and includes a

Glossary

summary of findings of materials used in crib mattresses as reported by companies via their websites, email, and written communication, or identified through laboratory testing.

Phthalates - Pronounced "THAL-ates" or \ 'tha-,l ts, are chemical compounds used by manufacturers to improve the strength and flexibility of their plastics. They are considered "everywhere" chemicals because they are so prevalent in consumer goods. In fact, these chemicals are so common that they are found in products like toys, vinyl, wall coverings, detergents, food packaging, pharmaceuticals, and personal care products, like aftershave lotions, soaps, shampoo, and even in cribs and other children's mattresses.

Plasticizers - A substance that is added to a material to make it softer and more flexible, to increase its plasticity, to decrease its viscosity, or to decrease friction during its handling in the manufacture.

Polyfill (Polyester fiberfill) - A synthetic fiber used for stuffing mattresses, sofas, pillows and other soft objects such as stuffed animals. It is commonly sold under the trademark name Poly-Fil, or un-trademarked as polyfill.

Polyurethane - Polyurethane is not the same thing as polyurethane foam (or memory foam), which off-gases harmful chemicals. Polyurethane, on the other hand, is a much better option than phthalates or PFAS for waterproofing certain items. The Global Organic Textile Standard (GOTS) even permits polyurethane as an accessory material in a GOTS certified organic product. However, when polyurethane is used to waterproof a crib mattress, it's usually incorporated just beneath the "ticking," which is the mattress's outer-most surface material. This leaves the surface without any waterproofing, which means it can collect leaks and grow contamination.

Polyurethane Foam (a.k.a. "memory foam", "soybean foam", "plant-based foam") - Polyurethane foam is a predominantly petroleum product made with ingredients associated with numerous health hazards. It also deteriorates over time, breaking up into small dust-like

particles that can easily become airborne (releasing VOC's associated with upper respiratory conditions and skin irritation). It is also a common component of mattresses.

Regrettable Substitution - When one chemical is banned, only to be replaced with another harmful or potentially worse chemical.

Suffocation Test - A mattress is graded on how breathable it is through the use of a simulated baby positioned face down and having air blown in and out of its mouth to simulate breathing.

Sustainable - If a company is truly committed to protecting the environment and consumer health, then it will likely have a strong involvement in environmental organizations and advocacy groups. Check for engagement in popular groups like:

- American Sustainable Business Network
- One Percent for the Planet
- EPA Green Power Partner
- Toxic-Free Future
- Organic Trade Association
- The Organic Center
- Environmental Working Group

Naturepedic is a proud member and supporter of the organizations listed above, along with many others.

Synthetic Chemicals - Refers to a substance that is man-made by synthesis, rather than being produced by nature.

Synthetic Latex - A blend of latex and fillers made from petrochemicals rather than rubber trees which makes the synthetic latex more carcinogenic. When making synthetic latex, fillers are added to create more firmness options, but it also means adding more harmful chemicals to the material. Known allergenic materials, like latex (both organic and synthetic), are commonly used in baby crib mattresses.

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“The Healthy Pregnancy Guide” (MADE SAFE & Plastic Pollution Coalition) - This guide provides steps and breaks down essential information about healthy pregnancy. From toxic substances found in everyday products, how to avoid them, and how they impact health and the environment, to how and why to avoid plastic during pregnancy and in everyday life. It also gives tips to start preparing for the baby’s arrival.

“The Mattress Still Matters” Report - A report on crib mattresses that provides critical information for parents that is not available anywhere else. It is based on research done by a group of environmental organizations including Clean and Healthy New York and the Ecology Center of Michigan, independent non-profit organizations whose only goal is to safeguard children’s health.

USDA (U.S. Department of Agriculture) - The federal executive department responsible for developing and executing federal laws related to farming, forestry, rural economic development, and food.

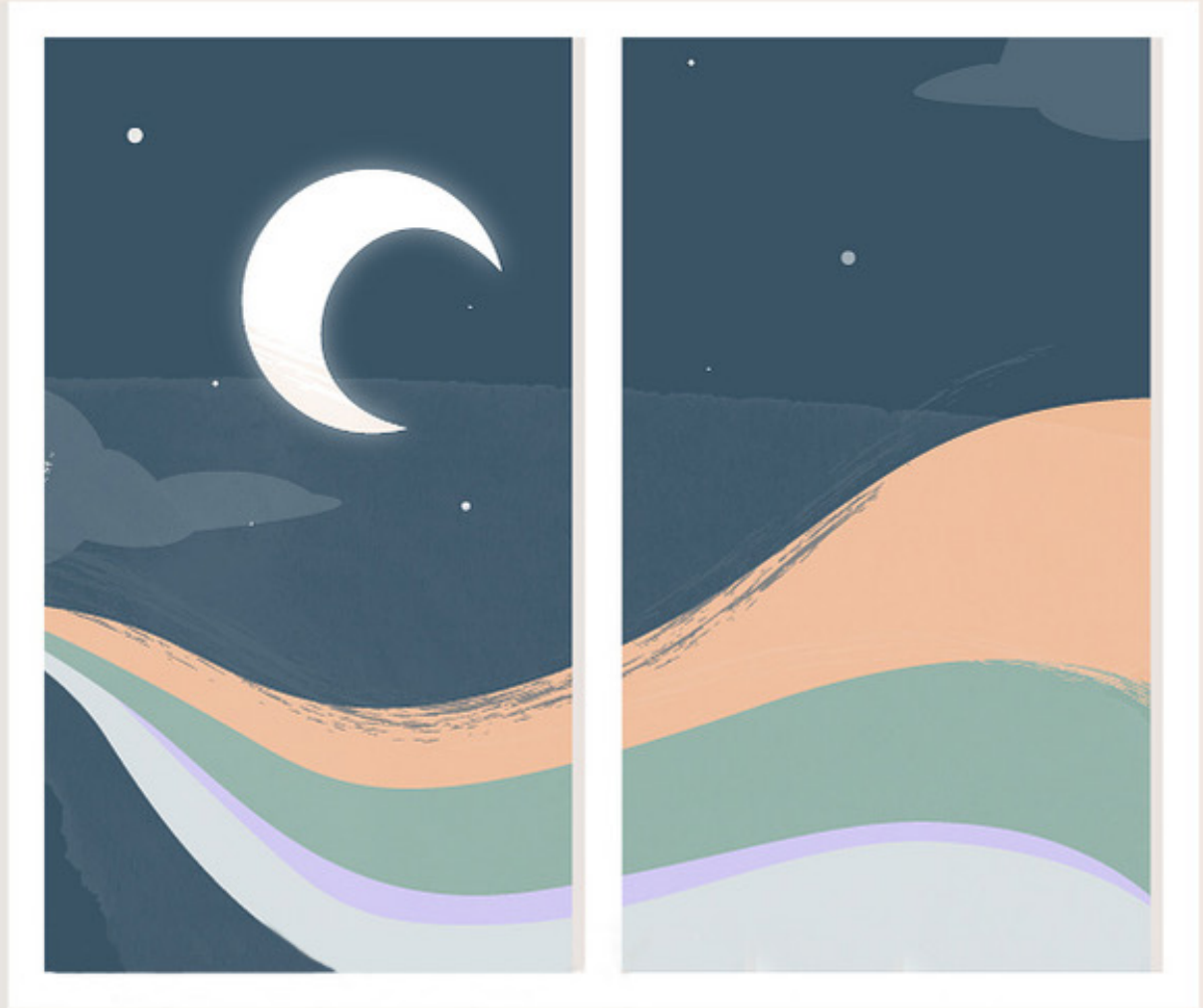
VOCs (Volatile Organic Compounds) - Gases that are emitted from liquids or solids, and which can damage the environment and human health.

Vinyl - Vinyl is commonly used as a shorthand name for polyvinyl chloride (PVC) plastic in a range of consumer products. However, vinyl is dangerous on two levels. First, some chemicals associated with PVC are [recognized carcinogens](#). Second, the plasticizers that are traditionally used to soften the hard PVC plastic and make it flexible are phthalates. Phthalates (and their variants) are increasingly shown to be toxic to human health, especially for developing babies and children.



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Crib Notes



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