INTELLIBED RESEARCH ARTICLE 4

Mattress Material Safety

BEST IN SUPPORT



BEST IN OUALITY



BEST IN SAFETY



BEST IN COMFORT



BEST IN DURABILITY



BEST IN VALUE



Mattress materials are not regulated or rated for safety, but they should be. Doctors (allergists, oncologists and immunologists) told us that the ideal mattress should use non-toxic, hypo-allergenic, anti-microbial and anti-fungal materials since we spend about one-third of our life lying in bed. Many sleepers report a sensitivity to the materials commonly used in today's mattresses. Their complaints range from headaches and rashes to more serious issues. Today's modern mattresses are filled with synthetic materials. For example, most mattresses contain various types of synthetic foam. Foam breaks down with use and releases chemicals, which is called "off-gassing". Polyurethane foam is made from chemicals that are known carcinogens. To see a white paper discussing medical studies and the toxicity contributions of different mattress materials go to Dissecting Toxic Links to Sleep.

Other toxic chemicals that can be found in conventional mattresses are PBDEs (polybrominated diphenyl ethers) or boric acid. These are used in many mattresses, especially the lower cost ones, as a flame retardant. By law all retail mattresses manufactured for sale in the US must contain a fire retardant barrier. PBDEs have been shown to have health effects in animals and are so toxic that Europe is phasing out the use of them completely.

Foam is the common ingredient used in every type of mattress. Softer foams are used in the cover and in the top layers of the mattress for cushioning. Firmer foams are used on the sides and either beneath the spring unit or in place of the spring unit.



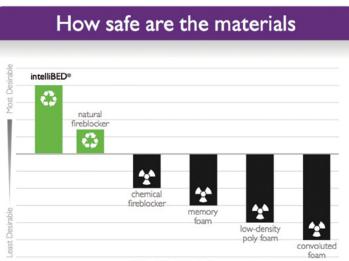


Mattress Material Safety

continued

Most foams are petrochemical based meaning they are made from fossil fuel (oil). As a result they can off-gas noxious fumes as they wear. So what is that smell in memory foam? It is the off-gassing of toxic chemicals and it is noticeably stronger for the first weeks to months of use, but the off-gassing continues until the patient stops using the mattress. The following chart ranks the materials used in mattresses according to their toxicity levels.

Safety Index



Safe Materials Index

- The ideal mattress uses safe, non-toxic materials
- All foams off-gas noxious fumes, intelli-gel does not
- Intelli-gel is non-toxic & hypo-allergenic
- IntelliBED uses natural fire blockers
- IntelliBED uses safer materials than other mattresses

intelliBED has replaced the synthetic foams used in other mattresses with intelli-gel for cushioning, a steel innerspring for support, inherently natural silica for fire blocking and organic cotton or cotton polyester for the quilt layer to create the safest, most durable sleep surface available for home use.

