

SAFETY OF YOUR PURE GENIUS FLOOR

Q1. I HAVE READ THAT THE EPA IS CONDUCTING A REVIEW OF NANOMATERIALS SUCH AS TiO₂. WHAT ARE THE IMPLICATIONS?

Nanomaterials are being used in more than 500 consumer products and the number is expected to grow. By 2015, it is estimated that consumer products with nanotechnology applications will value \$1 trillion on the world market. Nano-sized particles, such as TiO₂, Nano silver, Carbon nanotubes and Micronized iron are currently undergoing a thorough review for possible effects these nanomaterials have on human health and the ecosystem. Specifically, research will determine if there are environmental hazards and how these materials may be modified or managed to avoid potential human health or ecosystem effects.

Source: United States Environmental Protection Agency 2013.

Q2. I HAVE READ THAT TiO₂ IS A POTENTIAL CARCINOGEN? IS THAT TRUE?

TiO₂ has been used as a white pigment dating back centuries. It is readily available, chemically stable and harmless¹. TiO₂ is used extensively in many commercial products, including paint, cosmetics, plastics, paper and food, as an anti-caking or whitening agent. It is also used in cosmetic and skin-care products, and it is present in almost every sunblock, where it helps protect the skin from ultraviolet light². It is produced and used in the workplace in varying particle-size fractions, including fine and ultrafine sizes.

The risk for cancer, particularly lung cancer in mice, is only of a potential concern for ultrafine or nano-sized TiO₂. TiO₂ used in the making of Pure Genius is neither of these particle sizes and it is completely encapsulated in the finish so it is therefore harmless.

¹Source: Japanese Journal of Applied Physics, 2005

²Source: Canadian Centre for Occupational Health & Safety

Q3. HOW CAN THE FLOOR PURIFY THE AIR IF THE TiO₂ IS ENCAPSULATED INTO THE FINISH?

The way Pure Genius is applied is a very tricky operation, which renders it harder for the competition to actually get their hands on the technology. To put it in simple words, the TiO₂ molecules are for most parts bound to the coating while the upper ends of the molecules are exposed to the air, a meticulously controlled migration process achieves this, which is part of the application recipe.

Q4. WHAT ABOUT WHEN THE HOMEOWNER DECIDES TO RE-SAND THEIR FLOOR? CAN THE TiO₂ DUST POSE HEALTH RISKS?

Hardwood floor site finishing and resanding is a common practice and the sanding of floors with Pure Genius does not pose any additional health risks than a floor without Pure Genius. When working with dust, (like when sanding a floor) there are several safety tips one can take to minimize inhalation:

http://www.ccohs.ca/oshanswers/chemicals/lungs_dust.html