



## **California Proposition 65 Restricted Listings: Carbon Black and Titanium Dioxide**

### Overview

California's Office of Environmental Health Hazard Assessment (OEHHA) has listed carbon black (February 21, 2003) and titanium dioxide (September 2, 2011) on the Proposition 65 list. Both are restricted listings covering only (materials in the form of) airborne, unbound particles of respirable size.

### Carbon Black:

The listing only pertains to airborne, unbound carbon black particles of respirable size. As noted by IARC, the respirable fraction is *that fraction of an aerosol with an aerodynamic diameter suitable for penetration into the alveoli/gas exchange region of the lung (typically <10 μm)* (pp. 171-172, Volume 65, IARC Monographs on the Evaluation of Carcinogenic Risks to Human, 1996). OEHHA and the California Air Resources Board have also noted that, "In general, particles 10 μm or less in diameter are considered respirable by humans " (California Environmental Protection Agency, Air Resources Board, Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates, prepared by staff of the Air Resources Board and OEHHA, 2002). Thus, for the purposes of Proposition 65, carbon black particles 10 μm or less shall be considered respirable. Exposure to carbon black, per se, does not occur when it remains bound within a product matrix, such as rubber, ink or paint.

### Titanium Dioxide

The Office of Environmental Health Hazard Assessment (OEHHA) within the California Environmental Protection Agency is adding *titanium dioxide (airborne, unbound particles of respirable size)* to the list of chemicals known to the State of California to cause cancer for purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). The listing does not cover titanium dioxide when it remains bound within a product matrix.

