

EPA announces research strategy to study nanomaterials

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The U.S. Environmental Protection Agency today outlined a new research strategy to better understand how manufactured nanomaterials may harm human health and the environment. Nanomaterials are materials that are between approximately one and 100 nanometers. These materials are currently used in hundreds of consumer products, including sunscreen, cosmetics and sports equipment.

The strategy outlines what research EPA will support over the next several years to generate information about the safe use of nanotechnology and products that contain nano-scale materials. The strategy also includes research into ways nanotechnology can be used to clean up toxic chemicals in the environment.

Nanomaterials are used in a wide variety of consumer products. For instance, because of the unusual light-absorbing properties of the zinc or titanium nanoparticles they contain, high-SPF nano sunscreens are clear rather than white. Studies show that they provide superior protection against UV radiation.

EPA's role among federal agencies is to determine the potential hazards of nanotechnology and develop approaches to reduce or minimize any risks identified. As part of the strategy, researchers are investigating widely used nanomaterials, such as carbon nanotubes, which are used in vehicles, sports equipment and electronics; and <u>titanium dioxide</u>, which is used in paints, cosmetics and sunscreens.



The research is being conducted in EPA's own laboratories and by grant recipients as part of a collaborative effort with other federal organizations and the international community.

EPA's research is conducted using a multidisciplinary approach that examines all aspects of nanomaterials in the environment, from their manufacture and use to their disposal or recycling. EPA's new nanotechnology Web site provides more details about the research and offers news and publications.

More information about nanotechnology research: www.epa.gov/nanoscience

Source: U.S. Environmental Protection Agency

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