



News Release
ETC Group
April 7, 2006
www.etcgroup.org

Nanotech Product Recall Underscores Need for Nanotech Moratorium: *Is the Magic Gone?*

ETC Group today renewed its 2003 call for a global moratorium on nanotech lab research and a recall of consumer products containing engineered nanoparticles. There is particular urgency for those products that are ingested, applied to the body or released in the environment. The need for action is underscored following the decision by German authorities to recall a nanotech bathroom cleaner, “Magic Nano” – purportedly a product of nanotechnology. At least 77 people reported respiratory problems in late March after using the product. Six people were hospitalized but later released when their respiratory distress faded.¹ The company marketing “Magic Nano” is Kleinmann GmbH, a German subsidiary of Illinois Tool Works (a US Fortune 200 corporation with 650 subsidiaries in 45 countries and 49,000 employees). Kleinmann sells “Magic Nano” in a spray pump and as an aerosol spray. The recall only applies to the aerosol spray.² There is no information available regarding the nano chemical compound used, nor whether the problem lies with the nanoparticles or with the interaction between the particles and the conventional aerosol propellant.

The nanotechnology industry responded swiftly by pointing out that the recalled product may not even contain nanoparticles; the company could be simply taking advantage of the marketing cachet of high-tech “nano.” Michael Holman, an analyst at Lux Research in New York, told the *Washington Post* that the nanotech industry is working closely with government regulators to ensure product safety.

“They may be working closely, but they’re not working swiftly – or in the interests of public safety,” says Pat Mooney, Executive Director of ETC Group, a Canadian-based civil society organization monitoring nanotechnology. “We don’t really know if nanotechnology is to blame for the nanotech product recall. The important point is that no government anywhere regulates nano-scale materials if the same chemical substance has been vetted at the macro-scale. Determining health and safety is further complicated because there are no labeling requirements or even agreed-upon nanotech definitions or methods of measuring nanoparticles,” says Mooney.

Nanoparticles are generally understood to be particles below 100 nm in size – about 1/ 80,000 of a human hair – that take advantage of the quantum effects (property changes that occur at the nano-scale). In general, nanoparticles of 70 nm can enter the lungs while a 50 nm particle can enter cells and a 30 nm particle can pass through the blood/brain barrier. Not only can such tiny

particles go undetected by the body's immune system, they also exhibit properties not found at the macro-scale. For example, aluminum oxide – used in dentistry because of its inertness – can spontaneously explode at the nano-scale and is being tested as a potential rocket fuel.

“It's the unpredictable property changes that make 'nano' new and different. Given the complete absence of regulations to address those changes, we've been calling for a moratorium on the introduction of products like this since 2003,” adds Hope Shand in ETC Group's North Carolina office. “There are scores of products out there whose nano-scale ingredients are escaping regulatory review and they include anti-wrinkle creams, sunscreens, chocolate diet shakes, tooth powder, pesticides, cooking oil, vitamin supplements and more.”³ In June 2004 the UK's Royal Society and Royal Academy of Engineering recommended “that ingredients in the form of nanoparticles undergo a full safety assessment by the relevant scientific advisory body before they are permitted for use in products.”⁴

ETC's moratorium call encompasses nanotech laboratory research. “It is unethical to have workers conducting research or handling nanoparticles in the absence of agreed-upon safety standards and regulatory oversight,” says Shand.

To date, the scientific community and governments have not yet established “best practices” for this research. Scientists and regulators must quickly establish safety standards and a mechanism for monitoring and updating the standards as new information comes forward.

For more information on ETC Group's call for a moratorium, see: *Size Matters! The Case for a Global Moratorium*: <http://www.etcgroup.org/article.asp?newsid=392>

For further information, please contact:

Pat Mooney, ETC Group
etc@etcgroup.org +1 613 241-2267

Jim Thomas, ETC Group
jim@etcgroup.org +1 613 241-2267

Hope Shand or Kathy Jo Wetter, ETC Group
hope@etcgroup.org +1 919 960-5223
kjo@etcgroup.org +1 919 960-5223

Silvia Ribeiro
silvia@etcgroup.org + 52 5555 6326 64

¹ Rick Weiss, “Nanotech Product Recalled in Germany,” *Washington Post*, April 5, 2006.

² <http://www.kleinmann.net/html/index.php?name=News&file=article&sid=115>

³ See the Nanotechnology Consumer Products Inventory compiled by the Woodrow Wilson International Center for Scholars: www.nanotechproject.org/index.php?id=44

⁴ Royal Society and Royal Academy, *Nanoscience and nanotechnologies: opportunities and uncertainties*, July 2004, p. 85. On the Internet: <http://www.nanotec.org.uk/finalReport.htm>