

TACD

TRANS ATLANTIC DIALOGUE TRANSATLANTIQUE
CONSUMER DIALOGUE DES CONSOMMATEURS

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Resolution on Consumer Products Containing Nanoparticles

TACD believes that steps urgently need to be taken in order to ensure that products containing manufactured nanoparticles are safe and beneficial to consumers and do not lead to new human health and environmental risks. Nanoparticles are being used because common substances, when manufactured to very small sizes, have unique chemical and physical characteristics. While these developments may offer consumer benefits, scientists agree that at least in some cases these specific properties could also lead to risks which may not be posed by conventional-size particles. A recent study conducted by the University of Edinburgh, for example¹, found that one common type of nanomaterial (long, multi-walled carbon nanotubes) behaved much like asbestos. This study and others like it ²underline the urgent need for more research on health and environmental risks.

In the US, the Continental Western Insurance Group has ceased writing policies for companies using carbon nanotubes. In the EU, the European Commission and its advisory committees, including the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) and the Scientific Committee on Consumer Products (SCCP) and in the US, the Environmental Protection Agency (EPA) and Food and Drug Administration (FDA) have only begun considering the specific risks posed by nanoparticles and have identified key knowledge gaps. Safety and environmental issues of different kinds are posed by products used in or on the human body, such as food, medicines and cosmetic products, and in consumer products, such as paint, washing machines, toys and clothing. .

We urge the EU and US to convene intensive consultations among the relevant regulatory bodies on both sides of the Atlantic to exchange data and establish sound approaches to assessing and preventing risks. Regulatory systems regarding consumer and environmental protection must be updated in order to address the special characteristics of nanomaterials. The EU and US should take prompt action to address the following regulatory needs:

1. Agree on definitions: It is crucial to ensure that there is agreement on definitions of what constitutes nanoparticles and other relevant nanotechnology-related terms so

¹ Nature Nanotechnology **3**, 423 - 428 (2008)

² Takagi et al., Journal of Toxicological Sciences 33:105-116 (2008)

that lack of agreed definitions not further delay the establishment of effective regulation.

2. Identify products: The EU and US should establish mandatory reporting schemes to keep track of the introduction into the marketplace of manufactured nanomaterials and exchange information obtained about products being introduced. In addition, the EU and the US should establish an extensive inventory of all current and future nanomaterials used in products on the market. This inventory would have to be made publicly available.
3. Develop testing methodologies adapted to nanoparticles: It is crucial to develop new testing methods and technology to adequately assess the safety of products containing nanoparticles, for both health and the environment, over the entire lifecycle of the product (including manufacturing, transport, product use, recycling and disposal). These methods ought to be adapted to the particular characteristics of each kind of nanoparticle.
4. Address research gaps: The EU and US should direct and fund research into the extensive gaps in understanding about health and environmental risks, and coordinate their programs so as to make the most efficient use possible of available resources.
5. Develop and adapt regulatory frameworks to address the special characteristics of nanomaterials: This should include pre-market safety assessment and pre-approval of use of nanoparticles in consumer products to protect the public, workers, and the environment. Both the EU and US need to establish regulatory frameworks that take into account the novel issues and risks presented by nanotechnologies and require the pre-market assessment and approval of substances and finished products that use manufactured nanoparticles. For some kinds of nano applications it may also be appropriate to obtain post-market assessment data to ensure product safety and efficacy. The nature and extent of the assessment may vary. For instance, products used on or in the body would require a full human health and environmental safety assessment. Other products, such as a washing machine containing nanomaterial, may require a more extensive environmental assessment. These frameworks must be precautionary in nature and take into account the entire lifecycle of the material. Lack of data or evidence of specific harm cannot substitute for a reasonable certainty of safety. Safety data must be made transparent and available for public scrutiny. Regulatory approvals of products incorporating nanoparticles must state that their manufacturers retain liability for harm caused by the approved nanoparticles during the lifecycle of the product, in addition to being covered by general product liability law.
6. Mandatory labeling: Consumer products containing nano-ingredients and with which consumers come in direct, close or regular contact must be labeled. Our call for mandatory labeling in protection of the public's fundamental right to know in no way vitiates or supersedes the need for full and mandatory pre-market assessment and, where appropriate, approval of nano-products. Mandatory labeling, at least until a coherent and effective policy approach is in place, would be consistent with governments' recognition of the public's right to know and of its obligation to assist consumer's ability to make meaningful choices, backed up by broader information about the issues raised by nanotechnologies. Moreover, product labeling facilitates

documentation of potential environmental releases, human exposures, and accountability for adverse impacts. Labeling is a way that manufacturers can make information about in products available to the consumers. Consumer groups, likewise, can help consumers understand what it means when 'nano' is on the label of a product and why labeling is necessary.

7. Regulate marketing claims: Frameworks are needed to ensure that claims made about the purported benefits of nanoproducts can be substantiated and independently verified. Governments should ensure that unverified claims are withdrawn and that these withdrawals are publicized. Governments should support a center that collects and disseminates information to the public and especially the press about which products contain nanomaterials and what the nanomaterials are purported to accomplish in the products.
8. The public should be consulted about their views on nanotechnologies not only concerning regulatory matters, but about governments' investments in and subsidies for nanotechnologies. The public's views should be meaningfully integrated into policymaking and the direction of research proceeding and informing policymaking.
9. Governments should establish commissions to study the social and economic consequences of the displacement of existing industries and commodities by industries based in manufactured nanoparticles. Commissions to study ethical issues in nanotechnologies, e.g. uses of synthetic life forms in medicine and biofuels, should also be formed. Commission reports should inform the regulatory cost-benefit analysis and government decisions to invest or not in specific nanotechnologies.