


Fact Sheet on the Precautionary Matrix for Synthetic Nanomaterials

Key facts in brief

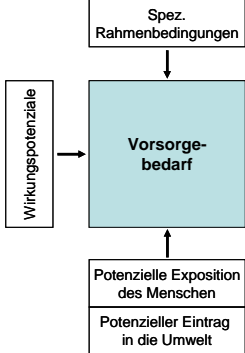
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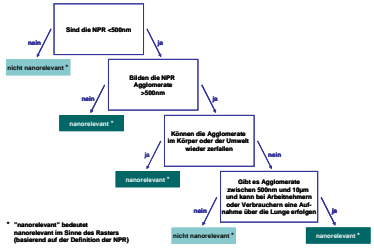


Vorsorgeraster für Synthetische Nanomaterialien

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Gesundheit BAG
Bundesamt für Umwelt BAFU





* "nanorelevant" bedeutet nanorelevant im Sinne des Restes basierend auf der Definition der NPS)

The precautionary matrix for synthetic nanomaterials

Background

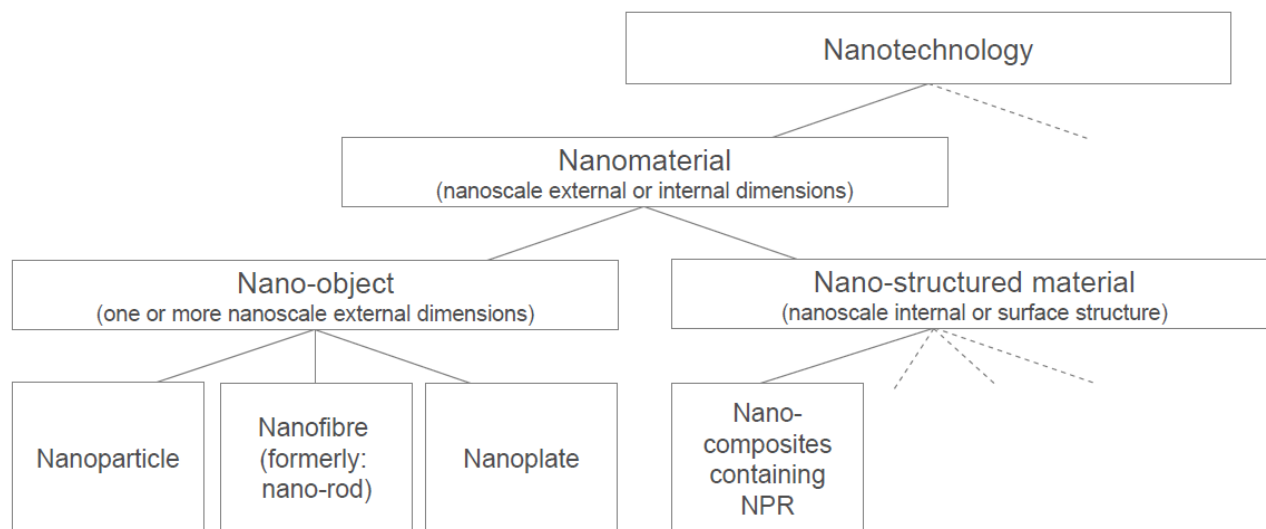
Industry and commerce are responsible for ensuring that synthetic nanomaterials are handled safely in a way that protects health and the environment. As yet, neither Swiss nor European legislation incorporates specific safety provisions for synthetic nanomaterials. The current scientific and methodological principles are inadequate to prepare such provisions. This situation is causing businesses considerable uncertainty about how to act and whether to invest, and it makes it difficult to have a public debate on the opportunities and risks presented by nanotechnology.

In its *Swiss Action Plan Synthetic Nanomaterials* issued in April 2008, the Federal Council called for a responsible development policy in the area of synthetic nanomaterials that takes account both of business interests and the protection of health and the environment.

The precautionary matrix produced on behalf of the *Federal Offices of Public Health and the Environment* is part of the action plan. As a voluntary resource it is designed to assist all stakeholders (industry, trade, commerce, authorities, insurers, etc.) who are responsible for the safety of employees, consumers or the environment in the preliminary clarification of any need for action.

Focus of the precautionary matrix

The precautionary matrix only regards as relevant nano-objects with at least two nano-scale dimensions or products containing these nano-objects. Such nano-objects are termed NPRs (NanoParticles and Rods) in the precautionary matrix:



Parameters for assessing the nanospecific precautionary need

The precautionary matrix is based on a limited number of evaluation parameters, including

- size of the particles,
- their reactivity and stability,
- their release potential,
- the amount of particles.

These parameters are used to estimate the precautionary need for employees, consumers and the environment at each defined step in the life cycle.

Scope of the precautionary matrix

The precautionary matrix is INTENDED ...

- ... to increase the extent to which all participants in the nanotechnology value chain assume responsibility towards employees, consumers and the environment
- ... to treat all nanomaterials as if no investigations had been carried out for specific cases so as to allow a consistently objective evaluation
- ... to identify key areas for action where necessary and pertinent
- ... to facilitate and objectify communication between all interest groups

The precautionary matrix is NOT INTENDED ...

- ... to replace a risk assessment of nanomaterials
- ... to evaluate the dangers and risks associated with specific nanomaterials
- ... to prevent the development of sustainable and safe nanotechnologies
- ... to produce an evaluation as to whether the current state of knowledge in a specific application is sufficient to assess risks
- ... to prescribe the selection and implementation of measures
- ... to determine whether or not nanomaterials are dangerous simply on the basis of the respective matrix classification

Information sources

FOPH website - Precautionary matrix for synthetic nanomaterials

Information and documents on the precautionary matrix can be obtained [here](#)
(or at <http://www.bag.admin.ch/themen/chemikalien/00228/00510/05626/index.html?lang=en>)

Available documents

- Fact sheet on the precautionary matrix
- Precautionary matrix for synthetic nanomaterials
- Guidelines on the precautionary matrix for synthetic nanomaterials
- FAQs

Further information on nanotechnology:

<http://www.bag.admin.ch/nanotechnologie>

FOEN website - Action plan "Synthetic Nanomaterials"

Information on the action plan can be obtained [here](#)
(or at <http://www.bafu.admin.ch/publikationen/publikation/00574/index.html?lang=en>)

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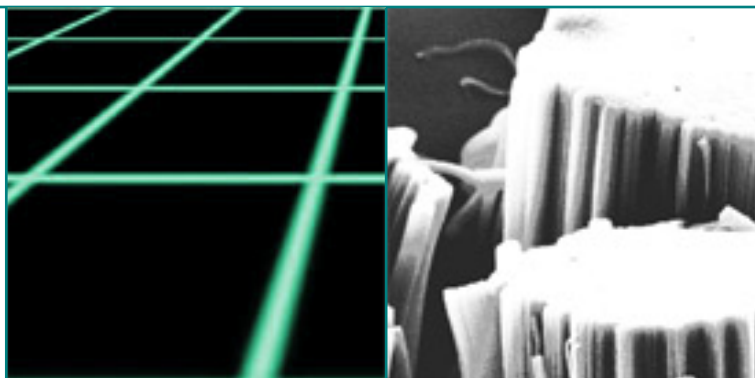
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