



Knowledge Base Nanomaterials

Latest research results on the
effects of nanomaterials on humans
and the environment

Scientifically profound
and
easy to understand

SPONSORED BY THE



Federal Ministry
of Education
and Research

within the Framework Programme
„From Material to Innovation“

THE PROJECT

What exactly are nanoparticles? What is meant by “exposure”? When do toxicologists speak of a risk? This and many more questions are answered by the new internet knowledge base www.nanoobjects.info.

Many consumers miss reliable and understandable information on nanomaterials and nanotechnology. In an interdisciplinary approach of human- and environmental toxicology, biology, physics, chemistry and pharmacy the DaNa^{2.0} project team provides more transparency and processes results of research on nanomaterials and their influence on humans and the environment in an understandable way.

For this purpose, DaNa^{2.0} processes results of completed and current projects, funded by the German Federal Ministry of Education and Research, analyses scientific publications, reports, and latest news on human and environmental toxicology, and wraps up the state of knowledge in the knowledge base.

DaNa^{2.0}

Information about nanomaterials and their safety assessment

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KNOWLEDGE BASE

Carbon black in tires, quantum dots in LEDs or titanium nitride in PET bottles ...

Our knowledge base provides information on products and applications of nanomaterials, illuminates health and environmental aspects.

More

Welcome to DaNa^{2.0} (Data and knowledge on Nanomaterials)

What exactly are nanoparticles? What is meant by “exposure”? When do toxicologists speak of a risk? This and many more questions regarding research on safety aspects of nanomaterials are answered here: www.nanoobjects.info

SOP

Protocols can be found here !

?

Ask our experts!

Current Research



Information on the sponsorship programmes of the German Federal Ministry of Education and Research on nanotechnologies for humans and the environment.

Read more...

Knowledge Base



A database with important and generally understandable aspects on health and environment of applied nanomaterials as well as facts on the safety of manufactured nanomaterials.

Read more...

Nano Basics



The chapters on release, exposure, uptake and behavior of nanomaterials in the human body and in the environment as well as the risk assessment will give you a first overview.

Read more...

Current Events

Twitter

News

Screenshot from www.nanoobjects.info

www.nanoobjects.info

THE KNOWLEDGE BASE

Here you find:

- **Relevant nanomaterials** that are **already being used**
- Detailed **explanations of important health and environmental aspects** of nanomaterials
- **Summaries and evaluation of safety studies** of the respective materials (release, uptake, and behaviour of the materials)
- Facts relating to **risk management**



SIMPLE NAVIGATION, UNDERSTANDABLE TEXTS

- Thanks to the **linking of material and application**, you will find your information quickly
- The **texts** are presented in such a way that they are **understandable** for **interested citizens**
- **Journalists, NGOs, politicians or scientists** will find links to further literature
- The page shows **applications and products**, which may contain nanomaterials and guide you directly to the relevant materials
- The **glossary** and the **FAQs** contain **valuable further information** about nanotechnology
- Webpages available in **German** and **English**



Open questions? dialog@nanopartikel.info

www.nanoobjects.info

LATEST INFORMATION ABOUT NANOSAFETY RESEARCH

Find information on running and completed projects, funded by the German Federal Ministry of Education and Research, on **nanosafety** for **humans and the environment**:

- Project description and project goals
- Duration
- Project partners
- Results achieved and publications



CONTINUOUS UPDATES

- Regular **extension** of the **knowledge base** with latest data
- **News and Events** on **nanomaterials**
- Additional data from scientific **publications**



WHAT IS NANOTECHNOLOGY?

Nanotechnology is considered one of the key technologies of the 21st century. It uses methods and effects that allow for the analysis, controlled modification, or the manufacture of objects and structures in the range of a few nanometres.

A nanometre is one billionth of a metre or one millionth of a millimetre and, hence, corresponds roughly to one fifty thousandth of the thickness of a human hair.

The success of this fascinating technology is particularly based on its versatility. It will bring about fundamental changes of basic research as well as many sectors of industry and of life from electronics to the health care system. On the nano level, physical or chemical properties like electrical conductivity, colour, melting point, and reactivity of materials may change dramatically.

These modified properties open up new technological opportunities, ranging from the conversion and storage of energy, to the lifespan of tyres, to surface protection and cosmetics, to the diagnosis and the fighting of diseases. Consequently, nanotechnology as a multi-disciplinary technology influences numerous new developments.

DaNa^{2.0} on Twitter



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CONTACT

Ask an expert: dialog@nanopartikel.info

Dr. Christoph Steinbach
DECHEMA e.V.
Theodor-Heuss-Allee 25
60486 Frankfurt/M. - Germany
Phone: +49 (0) 69 7564 -263
steinbach@dechema.de

Dr. Katja Nau
Karlsruhe Institute of Technology (KIT)
Institute for Applied Computer Science
Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen - Germany
Phone: +49 (0) 721 608 -24823
nau@kit.edu

THE PARTNERS



Karlsruhe Institute of Technology



Empa

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