

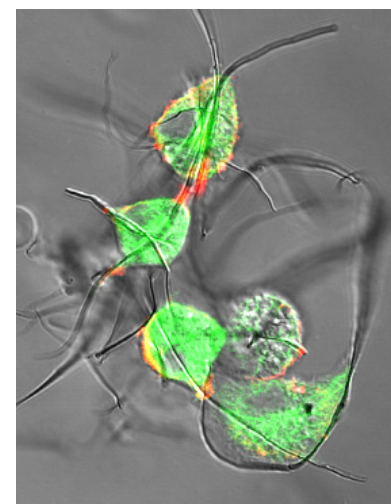
Product Safety & Toxicology

SAFENANO's Product Safety & Toxicology services can help you understand and minimise the health and environmental risks from the nanomaterials you manufacture, use, or incorporate into products.

Designed for your needs

We support SME- and large-scale manufacturing, materials and product R&D, and downstream users of nanomaterials, by offering:

- **Tailored toxicity testing**, which considers the nature and intended applications of your nanomaterials and products.
- **Safety by design**, assessing how the properties of your nanomaterials impact on biological functions, so that you can develop your products with an understanding of how they behave in biological or ecological systems.
- **REACH support and testing proposals**, for your substances which are within the scope of the European Union's chemicals regulation now, or in the future as specific provisions for nanomaterials emerge.



We consider what data you need, the material type, routes of exposure and endpoints of concern, in an **integrated modular approach** to study design and testing:

Nanoparticle characterisation

Size, morphology, charge, chemical composition, surface...

Selection of cell types for various routes of exposure and target tissues

Respiratory cells, macrophages, hepatocytes...

Cell viability studies:

Several complementary assays available

Pro-inflammatory response:

Secretion of cytokines mediating inflammatory processes and expression of their receptors

Oxidative stress assessment:

Use of multiples markers to assess the production of reactive species and anti-oxidant capacity

Genotoxicity testing:

In vitro testing to assess genome alterations

Our knowledge and expertise of particle & fibre toxicology and state-of-the-art *in vitro* assays can provide the hazard information you need to safely design, develop and market your materials and nanotechnology-enabled products.

Who to **Contact** ...

To discuss how SAFENANO's comprehensive and responsive approach can provide the support you need to stay safe with nanotechnology, contact:

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