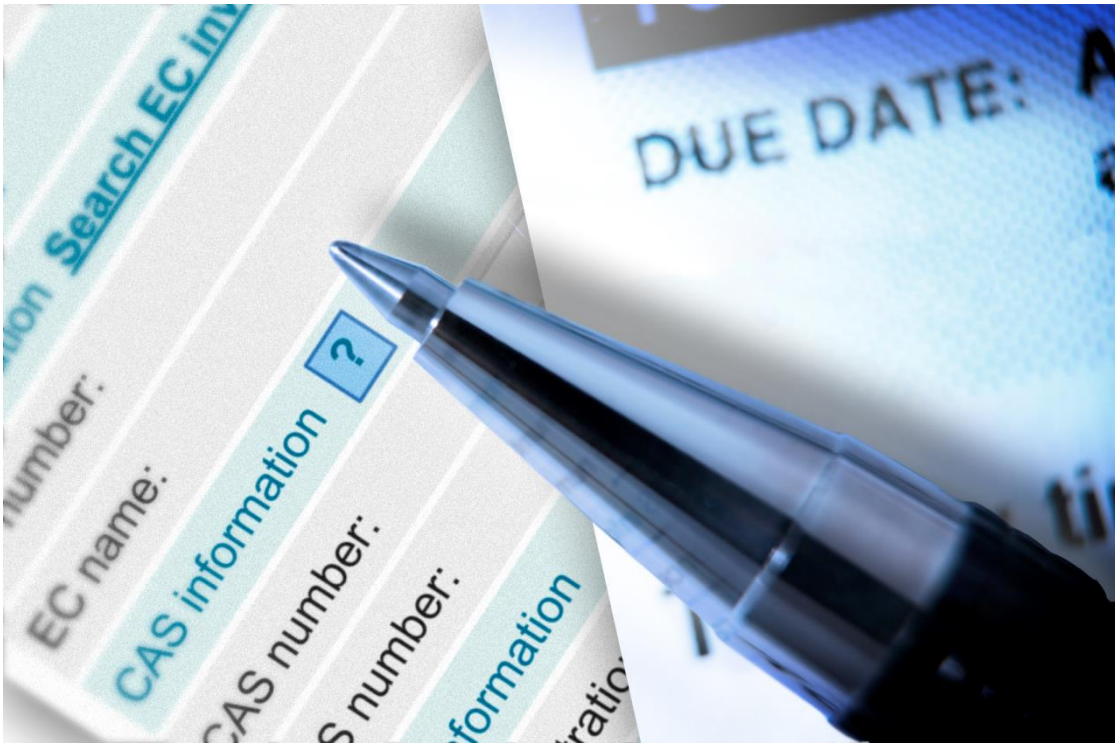
IOM

WORKING FOR A HEALTHIER FUTURE

Managing Your Risks & Regulatory Requirements

Supporting product stewardship of nanomaterials by reducing uncertainty, managing risks and meeting regulatory compliance.

Understanding and managing the often complex and dynamic regulatory landscape is crucial to businesses working at the cutting edge of novel materials and processes. SAFENANO helps you identify and address your obligations through our expertise in *risk assessment*, *regulatory compliance*, *SDS preparation* and *material characterisation*.



We are a leading provider of health and safety solutions to industry, commerce, public sector and professional bodies. We have a wealth of expertise and experience, enabling us to provide practical solutions to a broad spectrum of workplace health needs.

Risk Assessment

SAFENANO is a market-leading provider of risk assessment services using recognised best-practice standards and a lifecycle-thinking approach.

Our key services include:

- Risk assessments through integration of hazard and exposure evaluations, with recommendations on safe practice and appropriate control measures;
- Reviews to scope, assess and interpret evidence and emerging issues;
- Evidence appraisal to inform policy, guidance and standards development;
- Development of in-house exposure limits;
- Bespoke training to understand and manage risks.

Regulatory Support

Successful introduction of new materials within key target markets is contingent on regulatory compliance. SAFENANO offers support to manufacturers and users of novel materials in identifying and meeting regulatory requirements, including:

- Identifying and scoping international regulatory requirements (including reporting schemes) within key target markets;
- REACH compliance management, including substance identification, development of registration dossiers and chemical safety reports, development of testing proposals, exposure assessment and identification of exposure scenarios;
- Developing toxicological profiles for hazard classification and establishing Derived No Effect Levels (DNELs) and Risk Characterisation Ratios (RCRs) for human exposures;
- Classification and labelling of substances and mixtures according to CLP/GHS.

Safety Data Sheet Preparation

Given the remaining uncertainties regarding hazards of nanomaterials, Safety Data Sheets (SDSs) should reflect best available knowledge in relation to substance properties, safe handling and use. SAFENANO provides manufacturers and suppliers of novel materials with expert support in:

- Preparation of SDSs and hazard labels for substances and mixtures which are consistent with current best practice guidance;
- Identification and critical appraisal of information to fill data gaps.

Material Characterisation

Informed material characterisation is an important aspect in understanding the potential hazards presented by nanomaterials. Using a combination of instrumental and microscopic analysis techniques, SAFENANO has extensive experience in providing characterisation data to support unambiguous substance identification and risk assessment.

Contact us to discuss your requirements

OUR ANALYSIS TECHNIQUES

Particle Characterisation

- Dustiness testing of bulk powders to EN15051-2
- Particle Size Distribution (PSD) of dry powders and wet dispersions by laser diffraction to ISO 13320:2009 and ISO 14487:2000, and dynamic light scattering to ISO 22412:2008
- Size Weighted Respirable Fraction (SweRF) analysis by laser diffraction to ISO 13320:2009
- Zeta-potential and molecular weight analysis to ISO 13099-2:2012
- Microscopy and elemental analysis by SEM/EDXS
- Absolute density by helium pycnometry
- Nanoparticle characterisation as per the EC recommended definition 2011/696/EU
- Other specialist characterisation (e.g. TEM, BET)
- Aerosolisation and size-fractionation for the analysis of respirable particles based on aerodynamic size

Morphology & Chemical Analysis

- Elemental analysis, including trace metal content by ICP-AES and SEM/EDXS
- Organics & VOCs analysis by GC-FID, GC-MS and HPLC
- Acids anions by IC
- Crystalline silica analysis by XRD
- Elemental Carbon determination (NIOSH 5040) for carbon-based nanomaterials
- Bio-durability assessment
- Other specialist characterisation (e.g. FT-IR, XPS, SIMS, NMR, UV-vis, Raman)

OUR COMPANY

The Institute of Occupational Medicine (IOM) is one of the leading providers of workplace health research, consulting and services. Our expertise extends across a very wide range of disciplines.

We have a reputation for high quality, authoritative and independent measurement, surveys and reporting, which we undertake for hundreds of clients – large and small – each year.

Today, IOM is one of a select few internationally recognised authorities on workplace health around the world.

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