TOOLS ON NANOMATERIALS

Name: NanoSafer
Created by: Det Nationale Forskningscenter for Arbejdsmiljø/RIVM
Content: NanoSafer is a combined control-banding and risk management tool that enables assessment of the risk level and recommended exposure control associated with production and use of manufactured nanomaterials (e.g., nanoparticles, nanoflakes, nanofibers, and nanotubes) in specific work scenarios. In addition to manufactured nanomaterials, the tool can also be used to assess and manage emissions from nanoparticle-forming processes.
Link: http://www.nanosafer.org/
Availability: Free Web-tool. Registration is needed
Manual: Yes (in Danish)
Webinar (in Danish): https://www.youtube.com/watch?v=nfn2WAJnQ-4

Name: Stoffenmanager Nano
Created by: Consanta BV
Content: The Stoffenmanager Nano is a tool to prioritize health risks associated with working with nano-particles and it is designed as a tool for SMEs to rank potential health risks occurring as a result of exposure to Manufactured Nano Objects (MNO) at the workplace and to find effective risk management measures to manage these risks. Stoffenmanager Nano combines available hazard information of a substance with an inhalatory exposure estimate. Because of the high degree of uncertainty, Stoffenmananger Nano uses a qualitative assessment of the possible health risks. Based on physico-chemical properties and information on hazardous properties, the substance is classified in a specific risk band.
Link: https://nano.stoffenmanager.com/
Availability: Free Web-tool. Registration is needed
Manual: Yes (in English)
Webinar: (in English) https://www.youtube.com/watch?v=uW50npmRmhs

Name: ConsExpo
Created by: RIVM
Content: The ConsExpo nano tool can be used to estimate inhalation exposure to nanomaterials in consumer spray products. To run the model, user input on different exposure determinants such as the product and its use, the nanomaterial and the environmental conditions is required. Exposure is presented in different measures. The outcome of the assessment is an alveolar load in the lungs as one of the most critical determinants of inflammation of the lungs is both the magnitude and duration of the alveolar load of a nanomaterial. To estimate the alveolar load arising from the use of nano-enabled spray products, ConsExpo nano combines models that estimate the external aerosol concentration in indoor air, with models that estimate the deposition in and clearance of inhaled aerosol from the alveolar region.
Link: https://www.consexponano.nl/
Availability: Free Web-tool.
Manual: ?

Name: NanoFASE
Created by: RIVM
Content: Designed originally as a research tool, SimpleBox4Nano has proven most useful in dedicated environmental fate studies, focused at understanding and predicting environmental fate from fundamental physical and chemical substance properties. Screening-level quantitative model, expresses NP transport and concentrations in and across air, rain, surface waters, soil, and sediment, accounting for nano-specific processes such as aggregation, attachment, and dissolution. The SimpleBox4Nano is a nanomaterial-specific developent of the SimpleBox model, which underpins the EU's chemical risk and safety decision-support tool EUSES. SimpleBox4Nano simulates at regional to continental scale for screening level fate assessment. It can also be used to determine the maximum allowed production volume of NPs in EU since production volume is linear with the predicted milieu concentration.
Link: https://www.rivm.nl/en/soil-and-water/simplebox4nano
Availability: Excel-tool. Can be downloaded from: https://www.rivm.nl/en/soil-and-water/simplebox/simplebox4-0-nano-form. Registration is needed.
Manual: A very short introduction is given in a word-file

Name: -No name given – but this homepage give an excellent overview and introduction to nanomaterials
Created by: DG Health and Consumer Protection
Content: Level 1 – Level 3 information on nanomaterials covering definition and characterisation and testing of nanomaterials.
Link:https://ec.europa.eu/health/scientific_committees/opinions_layman/nanomaterials2012/en/index.htm#il1
Availability: Homepage
Manual: -