EU Initiatives for nanomaterials safety and transparency

- Three key developments aimed at addressing information on nanomaterials:
  - EU recommendation for definition of a nanomaterial
  - New information requirements to be submitted under the REACH Regulation
  - European Union Observatory for Nanomaterials (EUON)-launched 2017
EUON aims

- Provide objective and reliable information on the innovation and safety aspects of nanomaterials on the EU market
  - Collect and analyse information from a wide variety of publically available sources
  - Complement existing information with external studies
  - Present information on uses and safety of nanomaterials to laypersons
New OECD reports address safety of manufactured nanomaterials
6 June 2019
The reports aim to help select the best methods and parameters for the physico-chemical characterisation of nanomaterials. They include a framework for informing the risk assessment of manufactured nanomaterials and guiding principles for measurements and reporting.

News

11 April 2019
Open access to the JRC nanobiotechnology laboratory extended
The European Commission’s Joint Research Centre (JRC) has opened a call to access the JRC Nanobiotechnology Laboratory for external researchers from the public and private sectors. The call is open until 7 June 2019.

28 February 2019
Research on the safety of nanomaterials: beyond Horizon 2020
The NanoSafety Cluster coordinates the funding of research projects at the European level that address the safety aspects of nanomaterials. Read an interview about the benefits and risks of new innovations with Eva Valsami-Jones, the lead coordinator of the cluster.

25 February 2019
New report clarifies concepts and terms of EU nanomaterial definition
The Joint Research Centre (JRC) published a report clarifying key concepts and terms used in the European Commission’s nanomaterial definition. The report gives recommendations for a harmonised implementation of the definition.

More on the web

Preventing Corrosion of Oil Pipeline by Identifying a Nanoscale Problem
Source: Azonano.com

Swedish nanosafety research programme enters phase two
Source: SweiNanoSafe.se

Nanotechnology treatment reverses multiple sclerosis symptoms in mice
Source: News-medical.net

Painless skin patch collects fluid for diagnostic testing
Source: ScienceDaily.com

How to characterize nanoparticles
Source: Nanowerk.com
Chemicals in our life

Nano enhanced products

Lightweight and strong are some of the properties that have made nanoforms popular in many consumer products. Next time you get a new bike, you might find yourself sitting on nanoparticles.
NanoData

Nanotechnology is the study and application of phenomena and materials at atomic, molecular and macromolecular scales, where properties differ significantly from those at a larger scale. Through research, development and innovation, publications and patents are being published and products developed with nanotechnology at their core. Novel nano-based materials are finding applications in areas including health, energy, photonics, manufacturing and information and communications technologies.

This resource provides access to data, mainly from Europe, on the current status of nanotechnology including research publications and projects, patents applied for and granted, companies and products.

nanodata.echa.europa.eu
NanoData

Number of Patents Granted by Location and Sector

<table>
<thead>
<tr>
<th>Location</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sectors</td>
<td></td>
</tr>
<tr>
<td>Worldwide</td>
<td></td>
</tr>
</tbody>
</table>

Landscape by Sector

- Health
- Energy
- Manufacturing
- Photonics
- ICT
- Construction
- Transport
- Environment
eNanoMapper provides ontology and databases for managing data from EU funded research projects on health and safety of nanomaterials.

User can search, display, and filter data from different research projects.
Integration of national inventories

• By July 2019, EUON users will be able to search for nanomaterials in the EU market based on:
  • REACH registrations
  • Cosmetics notifications
  • National inventories: France and Belgium
• Search results to be integrated with ECHA’s disseminated data on chemicals
# Integration of national inventories


Filter the list

<table>
<thead>
<tr>
<th>Substance name</th>
<th>EC/List no</th>
<th>CAS no</th>
<th>REACH Registration</th>
<th>EU cosmetics inventory</th>
<th>Belgian nano inventory</th>
<th>French nano inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>(26)-10,12-dioxo-2,3,6,8,14,16-hexaaza-11-triazine-7,15,17-trione; 1,3,5-triazine-2,4,6-triamine</td>
<td>939-379-0</td>
<td>-</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
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<tr>
<td>(3-carboxy-1,1’-(1,2-dicyanovinylene)-2,2’-dipropathalato)nickel(II)</td>
<td>403-550-3</td>
<td>205057-15-4</td>
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<td></td>
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<tr>
<td>(C60-B6)(5,6)furanene</td>
<td>628-630-7</td>
<td>90085-96-8</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>1,1’-[(6-phenyl-1,3,5-triazine-2,4-diyldilimino)bianthraquinone</td>
<td>223-912-2</td>
<td>4118-16-5</td>
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<td>Yes</td>
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<tr>
<td>1,4-bis(arylamino)anthraquinone</td>
<td>241-379-4</td>
<td>17354-14-2</td>
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<tr>
<td>1,4-bis(methyaminoo)anthraquinone</td>
<td>204-155-7</td>
<td>116-75-6</td>
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<td>Yes</td>
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<tr>
<td>1,4-bis(p-tolylimino)anthraquinone</td>
<td>204-909-5</td>
<td>128-80-3</td>
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<td></td>
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<td>Yes</td>
</tr>
</tbody>
</table>
Integration of national inventories

Substance information

Infocards are automatically generated based on industry data. What is an infocard?

Reaction mass of (E)-3,7-dimethyl-oct-1,3,6-triene and (R)-p-mentha-1,8-diene and (Z)-3,7-dimethyl-oct-1,3,6-triene and 7-methyl-3-methylene-oct-1,6-diene and DL-borneol and bornan-2-one and cineole and linalool and linalyl acetate and p-menth-1-en-4-ol

IUPAC names 2

Substance identity
EC / List no.: 946-885-1
CAS no.: -
Mol. formula: -
No image available

Hazard classification & labelling
Danger! According to the classification provided by companies to ECHA in REACH registrations this substance may be fatal if swallowed and enters airways, causes serious eye irritation, may cause damage to organs, is harmful to aquatic life with long lasting effects, causes skin irritation and may cause an allergic skin reaction.

About this substance
This substance is manufactured and/or imported in the European Economic Area in 1 - 10 tonnes per year.
This substance is used in formulation or re-packing and in manufacturing.

Consumer Uses
ECHA has no public registered data indicating whether or in which chemical products the substance might be used. ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

Article service life
ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment. ECHA has no public registered data indicating whether or into which articles the substance might have been processed.

Widespread uses by professional workers

Properties of concern
S5

Nanomaterial form
Substance is known to be on the EEA market in nanomaterial form.

Important to know
Precautionary measures suggested by manufacturers and importers of this substance.
Guidance on the safe use of the substance provided by manufacturers and importers of this substance.
Food for thought

• Transparency is a core value for us and the EUON is a tool to achieve this strategic objective
• Our aspiration: EUON will be a trustworthy source of information contributing to public debate by raising awareness
• Recent mid-term evaluation concludes the EUON is delivering on its aims, but further improvement needed
• Three EU initiatives are linked and complement each other: REACH annexes, review of the definition and EUON
Thank you!

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