

EU-LCI value facts and information

What is an EU-LCI value?

EU-LCI values are health-based reference concentrations of chemical substances for inhalation exposure used to assess emissions after 28 days from a single construction product during a laboratory test chamber procedure as defined in the EN 16516. EU-LCI values are applied in product safety assessment with the ultimate goal to avoid health risks from long-term exposure of the general population. They are expressed as $\mu\text{g}/\text{m}^3$.

EU-LCI values have been developed for the evaluation of single construction product emissions and they do not constitute guideline values for indoor air quality. The data compiled during the setting of EU-LCI values may be informative for the process of establishing guidelines by other expert groups but has been evaluated by the EU-LCI Sub-Group according to the published protocol (ECA report No, 29) concerning emissions from construction products.

What is the scientific basis for an EU-LCI value?

EU-LCI values are derived using a compilation of epidemiological and toxicological data from risk assessments published by established international and national committees and/or other relevant studies. EU-LCI are thus based on reported scientific data and expert judgment and represent concentration levels that are considered likely not to cause adverse effects over the longer term by use of the model room as a reference.

How are EU-LCI values derived?

The derivation of EU-LCI values involves three main steps: compilation of toxicological data, data evaluation, and derivation of the EU-LCI value on the basis of a total (combined) assessment factor, based on established risk assessment principles and expert judgment, laid out in a standardised factsheet.

How are EU-LCI values used/applied?

EU-LCI values are used for assessing single product emissions after 28 days during a laboratory test chamber procedure. They are applied within health-related evaluation schemes to assess health risks from indoor product emissions on the basis of life-long exposure.

How do EU-LCI values relate to similar 'emission limit' values published by other authorities such as Anses (former AFSSET) in France or AgBB in Germany?

EU-LCI, French CLI and German NIK values have the same definition but historically different derivation procedures. In order to support the harmonisation of the health-based evaluation of construction product emissions in Europe the AgBB has, since 2015, adopted the EU-LCI values and their derivation procedure.