

EU-LCI value facts and information

What is an EU-LCI value?

EU-LCI values are health-based reference concentrations of volatile organic compounds for inhalation exposure used to assess emissions after 28 days from a single product during a laboratory test chamber procedure as defined in the Technical Specification TS 16516 of the horizontal testing method developed by CEN TC 351/WG 2. EU-LCI values should be applied in product safety assessment with the ultimate goal to avoid health risks from long-term exposure of the general population. They are usually expressed as $\mu\text{g}/\text{m}^3$.

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

EU-LCI values are derived using a compilation of epidemiological or toxicological data from risk assessments published by established international and national committees and/or other relevant studies. EU-LCIs are thus based on reported toxicity 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.