

Information on benzene

Limit value

	Averaging period	Limit value	Date by which limit value is to be met	Margin of tolerance
Limit value for the protection of human health	Calendar year	5 µg/m ³	1 January 2010	5 µg/m ³ in zones with time extension until 31 December 2014

The volume must be standardised at a temperature of 293 K and an atmospheric pressure of 101,3 kPa.

Upper and lower assessment thresholds

	Annual average
Upper assessment threshold	3.5 µg/m ³
Lower assessment threshold	2 µg/m ³

Data quality objectives

Data collection	Data quality objective
<i>Fixed measurements</i> Uncertainty Minimum data capture Minimum time coverage	25 % 90 % 35 % urban background and traffic sites (distributed over the year to be representative of various conditions for climate and traffic) 90 % industrial sites
<i>Indicative measurements</i> Uncertainty Minimum data capture Minimum time coverage	30 % 90 % 14 % (One day's measurement a week at random, evenly distributed over the year, or eight weeks evenly distributed over the year.)
<i>Modelling</i> Uncertainty Annual averages	50 %
<i>Objective estimation</i> Uncertainty	100 %

Reference method for the sampling/analysis of benzene

The reference method for the measurement of benzene is that described in EN 14662:2005, parts 1, 2 and 3 “Ambient air quality — Standard method for measurement of benzene concentrations”: Sampling on a sorbent cartridge followed by gas chromatographic determination.

Legal basis

- Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ EC. L 152/1)
- 39th Ordinance Implementing the Federal Immission Control Act (Ordinance on Air Quality Standards and Emission Ceilings - 39. BImSchV)