

# Information on benzene

## 1 Limit value

Table 1

	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 <sup>3</sup>	1 January 2010	5 µg/m <sup>3</sup> 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.

## 2 Upper and lower assessment thresholds

Table 2

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

### 3 Data quality objectives

Table 3

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

### 4 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.

## **5 Legal basis**

- Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ EC. L 152/1)
- COMMISSION DIRECTIVE (EU) 2015/1480 of 28 August 2015 amending several annexes to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council laying down the rules concerning reference methods, data validation and location of sampling points for the assessment of ambient air quality
- 39th Ordinance Implementing the Federal Immission Control Act (Ordinance on Air Quality Standards and Emission Ceilings - 39. BImSchV)