

Information on benzo(a)pyrene in PM₁₀

1 Target value

Table 1

	Averaging period	Target value	To be met since
Target value for the protection of human health	Calendar year	1 ng/m³	1 January 2013

The sampling volume refers to ambient conditions.

2 Upper and lower assessment thresholds

Table 2

Annual mean	
Upper assessment threshold	0.6 ng/m ³
Lower assessment threshold	0.4 ng/m ³

Umweltbundesamt Fachgebiet II 4.2 Wörlitzer Platz 1 06844 Dessau-Roßlau

www.umweltbundesamt.de

3 Data quality objectives

Table 3

Data collection	Data quality objective
Fixed measurements	
Uncertainty	50 %
Minimum data capture	90 %
Minimum time coverage	33 % evenly distributed over the year
Indicative measurements	
Uncertainty	50 %
Minimum data capture	90 %
Minimum time coverage	14 % evenly distributed over the year
Modelling	
Uncertainty	60 %
Objective estimation	
Uncertainty	100 %

4 Reference method for the sampling/analysis of benzo(a)pyrene in PM₁₀

The reference method for the sampling of polycyclic aromatic hydrocarbons in ambient air is described in EN 12341:2014. The reference method for the measurement of benzo(a)pyrene in ambient air is that described in EN 15549:2008 "Air quality — Standard method for the measurement of concentration of benzo[a]pyrene in ambient air". In the absence of a CEN standard method for the other polycyclic aromatic hydrocarbons referred to in Article 4(8), Member States are allowed to use national standards methods or ISO methods such as ISO standard 12884. A Member State may also use any other method which it can demonstrate give results equivalent to the above method.

5 Legal basis

- DIRECTIVE 2004/107/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air
- 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)