

Limit values and permitted number of instances exceeding the limit value, upper and lower assessment thresholds according to Act No. 201/2012 Coll. on the air protection, as amended, and Decree No. 330/2012 Coll., on the method of assessing and evaluating the level of pollution, the scope of informing the public about the level of ambient air pollution and during smog situations

For the protection of human health

Pollutant	Averaging interval	Assessment threshold [$\mu\text{g}\cdot\text{m}^{-3}$]		Limit value [$\mu\text{g}\cdot\text{m}^{-3}$]
		Lower assessment threshold	Upper assessment threshold	
SO ₂	1 hour	—	—	350 max. 24 times/year
	24 hours	50 max. 3 times/year	75 max. 3 times/year	125 max. 3 times/year
NO ₂	1 hour	100 max. 18 times/year	140 max. 18 times/year	200 max. 18 times/year
	calendar year	26	32	40
CO	max. daily 8-h running average	5 000	7 000	10 000
benzene	calendar year	2	3.5	5
PM ₁₀	24 hours	25 max. 35 times/year	35 max. 35 times/year	50 max. 35 times/year
	calendar year	20	28	40
PM _{2,5}	calendar year	12	17	20¹
Pb	calendar year	0.25	0.35	0.5
As	calendar year	0.0024	0.0036	0.006
Cd	calendar year	0.002	0.003	0.005
Ni	calendar year	0.010	0.014	0.020
benzo[a]pyrene	calendar year	0.0004	0.0006	0.001
O ₃	max. daily 8-h running average	—	—	120² 25x in 3-year average

1 In 2020, in the context of EU legislation and the amendment to the Air Act No. 369/2016 Coll., a stricter limit value of 20 $\mu\text{g}\cdot\text{m}^{-3}$ for the annual average concentration of PM_{2,5} entered into force. Until 2019, the limit value of 25 $\mu\text{g}\cdot\text{m}^{-3}$ applied

2 If the maximum permitted number of cases exceeding the limit value in a zone or agglomeration is observed, it is necessary to strive to achieve a zero number of such cases (averaging period is one year).

For the protection of ecosystems and vegetation

Pollutant	Averaging interval	Assessment threshold [$\mu\text{g}\cdot\text{m}^{-3}$]		Limit value [$\mu\text{g}\cdot\text{m}^{-3}$]
		Lower assessment threshold	Upper assessment threshold	
SO ₂	year and winter period (1.10.-31.3.)	8	12	20
NO _x	calendar year	19.5	24	30
O ₃	AOT40, calculated from 1h values between May and July ³	—	—	[$\mu\text{g}\cdot\text{m}^{-3}\cdot\text{h}$]
				18 000⁴ average for 5 years

3 AOT40 is the sum of differences between the hourly concentration higher than 80 $\mu\text{g}\cdot\text{m}^{-3}$ (= 40 ppb) and the value 80 $\mu\text{g}\cdot\text{m}^{-3}$ in the given period by using only hourly values measured every day between 8:00 and 20:00 CET.

4 If the limit value in the zone or agglomeration of 18 000 $\mu\text{g}\cdot\text{m}^{-3}\cdot\text{h}$ is complied with, it is necessary to strive to reach the limit value of 6 000 $\mu\text{g}\cdot\text{m}^{-3}\cdot\text{h}$ (averaging period is one year).