Information on sulphur dioxide (SO₂)

1 Limit value

Table 1

	Averaging period	Limit value since 1 January 2005
Hourly limit value for the protection of human health	1 hour	350 μg/m³, not to be exceeded more than 24 times a calendar year
Daily limit value for the protection of human health	24 hours	125 μg/m³, not to be exceeded more than 3 times a calendar year
Limit value for the protection of ecosystems	Calendar year and winter (1 October to 31 March)	20 µg/m³

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

2 Alert threshold

If more than $500 \ \mu\text{g/m}^3$ are measured over three consecutive hours at locations representative of air quality over at least $100 \ \text{km}^2$ or an entire zone or agglomeration, whichever is the smaller, the Member State has to apprehend adequate measures.

3 Upper and lower assessment thresholds

Table 2

	Health protection	Ecosystem protection
Upper assessment threshold	75 μg/m³ (daily mean), not to be exceeded more than 3 times in any calendar year	12 μg/m³ (annual man)
Lower assessment threshold	50 µg/m³ (daily mean), not to be exceeded more than 3 times in any calendar year	8 μg/m³ (annual mean)

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4 Reference method for the measurement of sulphur dioxide

The reference method for the measurement of sulphur dioxide is that described in EN 14212:2012 "Ambient air — Standard method for the measurement of the concentration of sulphur dioxide by ultraviolet fluorescence".

5 Data quality objectives

Table 3

Data collection	Data quality objective
Continuous measurement	
Uncertainty	15 %
Minimum data capture	90 %
Indicative measurements	
Uncertainty	25 %
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	
Hourly averages	50 %
Daily averages	50 %
Annual averages	30 %
Objective estimation	
Uncertainty	75 %

6 Minimum details to be made available to the public when the alert threshold for sulphur dioxide is exceeded

Details to be made available to the public should include at least:

- the date, hour, place and the reasons for the occurrence,
- any forecasts of: changes in concentrations together with the reasons for those changes,
- the geographical area concerned,
- the duration of the occurrence,
- the type of population potentially sensitive to the occurrence,
- the precautions to be taken by the sensitive population concerned.

7 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)