

2.G(b) - Other Product use: Tobacco

Short description

In this sub-category of 2.G(b) - Other product use: Tobacco Germany reports NO_x, NH₃, NMVOC, TSP, PM₁₀, PM_{2.5}, Cd, Co, Cu, Ni, Zn, Benzo(a)pyrene (B[a]P), Benzo(b)fluoranthene (B[b]F), Benzo(k)fluoranthene (B[k]F), Indeno(1,2,3-cd)pyrene (I[1,2,3-c,d]P), PAH 1-4 and PCDD/F emissions from the smoking of cigarettes and cigars.

NFR-Code	Name of Category	Method	AD	EF
2.G(b)	Other Product use: Tobacco	T2	NS	CS/D

Method

Activity data

Statistical data from the tax registration of sold tobacco ¹⁾, cigarettes and cigars are used as **activity data**.

Emission factors

Here, as study was made and published in October 2016 "Entwicklung von Methoden zur Berechnung von Emissionen von Luftschadstoffen aus der Verwendung von Holzkohle, Tabak, Feuerwerk und Kerzen sowie aus dem Entfachen von Brauchtuumsfeuern" from Nicola Toenges-Schuller et al., AVISO GmbH, for the Umweltbundesamt Germany. Based on this study, most of the EFs are an average value from different studys.

Table 1: Emission factors applied

	Value	Unit	Data source
NO _x	1.8	kg/t tobacco	EMEP/EEA 2019 ²⁾
NMVOC	9.56	kg/t tobacco	average value
NH ₃	5.33	kg/t tobacco	average value
CO	112.51	kg/t tobacco	average value
TSP/PM ₁₀ /PM _{2.5}	18.85	kg/t tobacco	average value
BC	0.074	kg/t tobacco	average value
Cd	0.0054	kg/t tobacco	EMEP/EEA 2019
Cu	5.4	g/t tobacco	EMEP/EEA 2019
Ni	2.7	g/t tobacco	EMEP/EEA 2019
Zn	2.16	g/t tobacco	average value
PCDD/F	0.1	µg/t tobacco	EMEP/EEA 2019
B[a]P	0.21	g/t tobacco	average value
B[b]F	0.26	g/t tobacco	average value
B[k]F	0.26	g/t tobacco	average value
I[1,2,3-c,d]P	0.42	g/t tobacco	average value

Recalculations

No recalculations were made.



For **pollutant-specific information on recalculated emission estimates for Base Year and 2019**, please see the pollutant specific recalculation tables following [chapter 8.1 - Recalculations](#).

Planned improvements

No planned improvements.

¹⁾ Destatis, Besteuerung von Tabakwaren 73411, SBA FS 14 R 9.1.1 Absatz von Tabakwaren

²⁾ EMEP/EEA air pollutant emission inventory guidebook 2019, Copenhagen, 2019