

# Emission Standards for Passenger Cars

EU emission standards are summarized in the following tables. All dates listed in the tables refer to new type approvals. The EC Directives also specify a second date—one year later, unless indicated otherwise—which applies to first registration (entry into service) of existing, previously type-approved vehicle models.

**Table 1**  
EU Emission Standards for Passenger Cars (Category M<sub>1</sub>\*)

Stage	Date	CO	HC	HC+NO <sub>x</sub>	NO <sub>x</sub>	PM	PN
		g/km					
<b>Compression Ignition (Diesel)</b>							
Euro 1†	1992.07	2.72 (3.16)	-	0.97 (1.13)	-	0.14 (0.18)	-
Euro 2, IDI	1996.01	1.0	-	0.7	-	0.08	-
Euro 2, DI	1996.01 <sup>a</sup>	1.0	-	0.9	-	0.10	-
Euro 3	2000.01	0.64	-	0.56	0.50	0.05	-
Euro 4	2005.01	0.50	-	0.30	0.25	0.025	-
Euro 5a	2009.09 <sup>b</sup>	0.50	-	0.23	0.18	0.005 <sup>f</sup>	-
Euro 5b	2011.09 <sup>c</sup>	0.50	-	0.23	0.18	0.005 <sup>f</sup>	6.0×10 <sup>11</sup>
Euro 6	2014.09	0.50	-	0.17	0.08	0.005 <sup>f</sup>	6.0×10 <sup>11</sup>

\* At the Euro 1..4 stages, passenger vehicles > 2,500 kg were type approved as Category N<sub>1</sub> vehicles

† Values in brackets are conformity of production (COP) limits

a – until 1999.09.30 (after that date DI engines must meet the IDI limits)

b – 2011.01 for all models

c – 2013.01 for all models

d – and NMHC = 0.068 g/km

e – applicable only to vehicles using DI engines

f – 0.0045 g/km using the PMP measurement procedure

<http://www.dieselnet.com/standards/eu/hd.php>