Australian Government
Department of Infrastructure, Transport, Regional Development, Communications and the Arts

# Summary of noxious exhaust emission limits for new **petrol** passenger cars in Australia, 1972 to present

**December 2023**

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| Standard[[1]](#endnote-1) | Date Introduced[[2]](#endnote-2) | Hydrocarbons (HC[[3]](#endnote-3)) | Carbon Monoxide (CO) | Oxides of Nitrogen (NOx) | Particulate Mass (PM)[[4]](#endnote-4) | Number of particles[[5]](#endnote-5) | Source Standard / Test Method |
| ADR 26 | 1/1/1972 | NA | 4.5% by vol | NA | NA | NA | Idle CO test |
| ADR 27 | 1/1/1974 | 8.0 - 12.8 g/test | 100 - 220 g/test & 4.5% by vol | NA | NA | NA | ECE 'Big Bag' |
| ADR 27A | 1/7/1976 | 2.1 g/km | 24.2 g/km | 1.9 g/km | NA | NA | US '72 FTP |
| ADR 27B | 1/1/1982 | 2.1 g/km | 24.2 g/km | 1.9 g/km | NA | NA | US '72 FTP |
| ADR 27C[[6]](#endnote-6) | 1/1/1983 | 2.1 g/km | 24.2 g/km | 1.9 g/km | NA | NA | US '72 FTP |
| ADR 37/00 | 1/2/1986 | 0.93 g/km | 9.3 g/km | 1.93 g/km | NA | NA | US '75 FTP |
| ADR 37/01 | 1/1/1997 –  1/1/1999 | 0.26 g/km | 2.1 g/km | 0.63 g/km | NA | NA | US '75 FTP |
| ADR 79/00[[7]](#endnote-7) (Euro 2) | 1/1/2003 – 1/1/2004 | 0.25 g/km | 2.2 g/km | 0.25g/km | NA | NA | UN R83/04 (NEDC) |
| ADR 79/01 (Euro 3) | 1/1/2005 – 1/1/2006 | 0.2 g/km | 2.3 g/km | 0.15 g/km | NA | NA | UN R83/05 (NEDC) |
| ADR 79/02 (Euro 4) | 1/7/2008 – 1/7/2010 | 0.1 g/km | 1.0 g/km | 0.08 g/km | NA | NA | UN R83/05 (NEDC) |
| ADR 79/03[[8]](#endnote-8) (Euro 5a) | 1/11/2013  (new models only) | 100mg/km  68mg/km (NMHC) | 1000mg/km | 60mg/km | 4.5mg/km | NA | UN R83/06 (NEDC) |
| ADR 79/04 (Euro 5b) | 1/11/2016 | 100mg/km  68mg/km (NMHC) | 1000mg/km | 60mg/km | 4.5mg/km | NA | UN R83/06 (NEDC) |
| ADR 79/05 (Euro 6) | 1/12/2025 – 1/7/2028 | 100mg/km  68mg/km (NMHC) | 1000mg/km | 60mg/km | 4.5mg/km | 6x1011/km | UN R 83/08, 154 (WLTP) and 168 (RDE) |

FTP – Federal Test Procedure, NEDC – New European Drive Cycle, WLTP – Worldwide harmonised Light vehicles Test Procedure, RDE – Real Driving Emissions

1. **To find the ADRs (except those prior to ADR79/00 which are now obsolete) follow these steps:**

   **1. Go to** [www.legislation.gov.au](http://www.legislation.gov.au)

   **2. On the left of the homepage choose "Legislative Instruments – In force".**

   **3. Under the Principal in force tab, click on "Ve" (for Vehicle).**

   **The ADRs will be listed on the screen and you can open each of them individually to get the details.** [↑](#endnote-ref-1)
2. Where 2 dates specified, first date applies to vehicle models first produced on or after that date, with all new vehicles required to comply by the second date. [↑](#endnote-ref-2)
3. Separate Non-Methane Hydrocarbon (NMHC) limits only apply from Euro 5 onwards. [↑](#endnote-ref-3)
4. Particulate mass limits apply from Euro 5 onwards to petrol vehicles with direct injection engines. [↑](#endnote-ref-4)
5. Particulate number limits apply from Euro 6 onwards to petrol vehicles with direct injection engines. [↑](#endnote-ref-5)
6. ADR27C introduced a number of administrative changes, based on procedures of ADR37/00. [↑](#endnote-ref-6)
7. ADR 79/00 has a combined HC+NOx limit of 0.5, so the HC:NOx split is indicative only [↑](#endnote-ref-7)
8. The “core” Euro 5 requirements which apply in ADR79/03 require compliance with all the technical requirements of UN Regulation 83/06 except that ADR79/03:

   * allows the provision of PM mass emissions data based on the previous UN R83/05 (Annex 4) Type I test procedure (with a PM mass emissions limit of 0.005g/km) in lieu of data collected under the revisedtest procedure (Annex 4a of UN R83/06) which specifies a limit of 0.0045g/km);
   * accepts a relaxed OBD threshold limit (80mg/km) for PM mass for M and N category vehicles of reference mass >1760kg;
   * does not require compliance with the PM number limit specified for diesel vehicles in UN R83/06;
   * does not require compliance with the In Use Performance Ratio for OBD systems in UN R83/06;
   * does not require the NOx monitoring for petrol vehicles specified in UN R83/06; and
   * only requires flex fuel vehicles to meet the Type VI test when tested on petrol

   [↑](#endnote-ref-8)