



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

Standard ⁱ	Date Introduced ⁱⁱ	Hydrocarbons (HC ⁱⁱⁱ)	Carbon Monoxide (CO)	Oxides of Nitrogen (NO _x)	Particulate Mass (PM) ^{iv}	Number of particles ^v	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 ^{vi}	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 ^{vii} (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)

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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^{viii} (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	6x10 ¹¹ /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

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

1. Go to 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.

ⁱⁱ 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.

ⁱⁱⁱ Separate Non-Methane Hydrocarbon (NMHC) limits only apply from Euro 5 onwards.

^{iv} Particulate mass limits apply from Euro 5 onwards to petrol vehicles with direct injection engines.

^v Particulate number limits apply from Euro 6 onwards to petrol vehicles with direct injection engines.

^{vi} ADR27C introduced a number of administrative changes, based on procedures of ADR37/00.

^{vii} ADR 79/00 has a combined HC+NO_x limit of 0.5, so the HC:NO_x split is indicative only

^{viii} 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 revised test 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 NO_x 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