

TECHNICAL BULLETIN

ACEA

Issue: March 2015

ACEA (Association des Constructuers Europeans de l'Automobile) is the European Equivalent of the API (American Petroleum Institute) and it is representative of 15 Europe based car, van, bus and truck manufacturers with production sites in the EU. It has close relations with the 29 national automobile manufacturers' associations in Europe, and maintains a dialogue on international issues with automobile associations around the world.

The members of ACEA are -

BMW Group DAF Daimler FCA (Fiat Chrysler Automobiles) Ford Hyundai Iveco Jaguar / Land Rover Opal Group

Volkswagen Renault PSA (Peugeot Citroen)

Volvo Toyota

ACEA does not certify oils, nor license, nor register, compliance certificates. Oil manufacturers are themselves responsible for carrying out all oil testing and evaluation according to recognised engine lubricant industry standards and practices. In particular the ACEA European Oil Sequences refer to many standard CEC (Coordinating European Council) tests. CEC is an Industry-based organisation which develops Test Methods for the performance testing of Automotive Engine Oil, Fuels & Transmission Fluids (using gasoline & diesel engines). In addition, it covers Marine & Large Engine Oils, Two-stroke Engine Oils & Associated Bench Tests.

Specifications

Petrol & Diesel Engine Oils

<u>A1/B1</u> Stable, stay-in-grade oil intended for use at extended drain intervals in petrol engines and car & light commercial diesel engines specifically designed to be capable of using <u>low friction low viscosity oils</u> with a high temperature / high shear rate viscosity of 2.6 mPa*s for xW/20 and 2.9 to 3.5 mPa.s for all other viscosity grades. These oils are unsuitable for use in some engines.

<u>A3/B3</u> Stable, stay-in-grade oil intended for use in high performance petrol engines and car & light van diesel engines and/or for extended drain intervals where specified by the engine manufacturer, and/or for year-round use of low viscosity oils, and/or for severe operating conditions as defined by the engine manufacturer.

<u>A3/B4</u> Stable, stay-in-grade oil intended for use in high performance petrol and direct injection diesel engines, but also suitable for applications described under A3/B3.

<u>A5/B5</u> Stable, stay-in-grade oil intended for use at extended drain intervals in high performance petrol engines and car & light van diesel engines designed to be capable of using <u>low friction low viscosity oils</u> with a High temperature / High shear rate (HTHS) viscosity of 2.9 to 3.5 mPa.s. These oils are unsuitable for use in some engines.

Catalyst Compatible Oils

- **C1** Stable, stay-in-grade oil intended for use as catalyst compatible oil in vehicles with DPF and TWC in high performance car and light van diesel and petrol engines requiring low friction, low viscosity, low SAPS oils with a minimum HTHS viscosity of 2.9 mPa.s. These oils will increase the DPF and TWC life and maintain the vehicles fuel economy. These oils have the lowest SAPS limits and are unsuitable for use in some engines.
- **C2** Stable, stay-in-grade oil intended for use as catalyst compatible oil in vehicles with DPF and TWC in high performance car and light van diesel and petrol engines designed to be capable of using low friction, low viscosity oils with a minimum HTHS viscosity of 2.9mPa.s. These oils will increase the DPF and TWC life and maintain the vehicles fuel economy. These oils are unsuitable for use in some engines.
- **C3** Stable, stay-in-grade oil intended for use as catalyst compatible oil in vehicles with DPF and TWC in high performance car and light van diesel and petrol engines, with a minimum HTHS viscosity of 3.5mPa.s. These oils will increase the DPF and TWC life. These oils are unsuitable for use in some engines.
- **C4** Stable, stay-in-grade oil intended for use as catalyst compatible oil in vehicles with DPF and TWC in high performance car and light van diesel and petrol engines requiring low SAPS oil with a minimum HTHS viscosity of 3.5mPa.s. These oils will increase the DPF and TWC life. These oils are unsuitable for use in some engines.





PENRITE OIL COMPANY PTY LTD, 88 Lewis Road, Wantirna South Victoria AUSTRALIA 3152, ABN 25 005 001 525 Enquiries: Phone 1300-PENRITE (1300 736 748) Fax: 1800-PENRITE (1800 736 748) International: Phone: 61 3 9801 0877,Fax: 61 3 9801 0977

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Heavy Duty

E4 Stable, stay-in-grade oil providing excellent control of piston cleanliness, wear, soot handling and lubricant stability. Recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV and Euro V emission requirements and running under very severe conditions, e.g. significantly extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines without particulate filters, and for some EGR engines and some engines fitted with SCR NOx reduction systems.

E6 Stable, stay-in-grade oil providing excellent control of piston cleanliness, wear, soot handling and lubricant stability. Recommended for highly rated diesel engines meeting Euro I, Euro II, Euro III, Euro IV and Euro V emission requirements and running under very severe conditions, e.g. significantly extended oil drain intervals according to the manufacturer's recommendations. It is suitable for EGR engines, with or without particulate filters, and for engines fitted with SCR NOx reduction systems. E6 quality is strongly recommended for engines fitted with particulate filters and is designed for use in combination with low sulphur diesel fuel.

E7 Stable, stay-in-grade oil providing effective control with respect to piston cleanliness and bore polishing. It further provides excellent wear control, soot handling and lubricant stability. Recommended for highly rated diesel engines meeting Euro I, Euro II, Euro IV and Euro V emission requirements and running under severe conditions, e.g. extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines without particulate filters, and for most EGR engines and most engines fitted with SCR NOx reduction systems.

E9 Stable, stay-in-grade oil providing effective control with respect to piston cleanliness and bore polishing. It further provides excellent wear control, soot handling and lubricant stability. Recommended for highly rated diesel engines meeting Euro I, Euro II, Euro IV and Euro V emission requirements and running under severe conditions, e.g. extended oil drain intervals according to the manufacturer's recommendations. It is suitable for engines with or without particulate filters, and for most EGR engines and for most engines fitted with SCR NOx reduction systems. E9 is strongly recommended for engines fitted with particulate filters and is designed for use in combination with low sulphur diesel fuel.

Here to view a complete Automotive Engine Oil Summary of all the popular Penrite brands.

<u>Click Here</u> to visit the Penrite Recommendation Guide, which will ensure you receive the correct oil for your vehicle.



