



European
Automobile
Manufacturers
Association

ACEA EUROPEAN OIL SEQUENCES

GENERAL REQUIREMENTS

SERVICE FILL ENGINE OILS for GASOLINE & LIGHT-DUTY DIESEL ENGINES and HEAVY-DUTY DIESEL ENGINES

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Date		Update
30 April 2021	Rev. 0	New General Requirements Document for Light-Duty and Heavy-Duty ACEA Oil Sequences. This revision includes the links to the new ACEA Light-Duty Oil Sequence 2021 and the ACEA Heavy-Duty Oil Sequence 2016 Rev3 document

This document details the general requirements for the ACEA European Oil Sequences for Service-fill Oils for Gasoline engines, for Light-Duty Diesel engines, for Gasoline & Light-Duty Diesel engines with aftertreatment devices and for Heavy-Duty Diesel engines. This document should be read in conjunction with:

- The latest version of the ACEA European Oil Sequences for Service-fill Oils for Gasoline engines, for Light-Duty Diesel engines and for Gasoline & Light-Duty Diesel engines with aftertreatment devices,
- https://acea.be/uploads/news_documents/2021_ACEA_oil_sequences_light-duty_engines.pdf, and
- The latest version of the ACEA European Oil Sequences for Service-fill Oils for Heavy-Duty Diesel engines
- https://acea.be/uploads/news_documents/2016_ACEA_oil_sequences_heavy-duty_engines.pdf.

Those two documents detail the periods during which valid claims can be made for oils meeting those specifications and the full specifications of those respective ACEA Oil Sequences.

The ACEA European Oil Sequences for Service-fill Oils comprise currently oil classes for Gasoline, Light-Duty Diesel engines and Heavy-Duty Diesel engines. Within each of the classes there are categories that reflect different performance requirements. Typical applications for each sequence are described in the specific Oil Sequence for guidance only. Specific applications of each sequence are the responsibility of individual engine manufacturers for their own vehicles / engines.

The Oil Sequences define the minimum quality level of an oil product for self-certification to EELQMS and presentation to ACEA members. Individual member companies of ACEA may require performance parameters other than those covered by the tests shown, or more stringent limits.

CONDITIONS FOR USE OF PERFORMANCE CLAIMS AGAINST THE ACEA OIL SEQUENCES

ACEA requires that any claims by oil companies or oil distributors for Oil performance to meet these Oil Sequences must be based on credible data and controlled tests in accredited test laboratories.

ACEA requires that engine performance testing used to support a claim of compliance with these ACEA Oil Sequences should be generated according to the **European Engine Lubricants Quality Management System**, EELQMS (available at www.eelqms.eu), but ACEA reserves the right to define alternatives in exceptional cases.

EELQMS addresses product development testing and product performance documentation, and involves the registration of all candidate and reference oil testing and defines the compliance process. Compliance with the ATIEL Code of Practice¹, which forms part of the EELQMS, is mandatory for any claim to meet the requirements of this issue of the ACEA sequences. Therefore, ACEA requires that claims against the ACEA Oil Sequences can only be made by oil companies who have signed the EELQMS oil marketers' Letter of Conformance (for details: www.atiel.org).

The ACEA Oil Sequences are subject to continuous development. Replacement tests and other changes required by the European vehicle manufacturers are integrated and new issues are published on a regular basis. As new editions are published older editions have to be withdrawn. The validity of old and new editions of the ACEA Oil Sequences are shown in the respective ACEA Oil Sequences.

CERTIFICATION and REGISTRATION

Claims against the ACEA Oil Sequences can be made on a self-certification basis. For any Claim being made against these ACEA Oil Sequences, ACEA recommends oil suppliers to register their products with the ACEA Registration System on the ACEA website on their launch into the market. Registration into the ACEA Registration System does not replace the required EELQMS oil marketers' Letter of Conformance registration in SAIL.

All information needed for Registration in ACEA Registration System is available on the ACEA website, see: <https://app.acea.be/EOR>

After completing the form on the ACEA website, it will be saved on the ACEA server. If claims are no longer needed oil companies are asked to delete their registration. If registered claims continue to be used after three years, re-registration is recommended.

¹ The ATIEL Code of Practice is the sole property of ATIEL and is available from ATIEL (Association Technique de l'Industrie Européenne des Lubrifiants), 14b Rue de la Science, 1040, Brussels, Belgium.

NOMENCLATURE & ACEA PROCESS

Each set of Oil Sequences is designated for consumer use by a 2-part code comprising a letter to define the CLASS (e.g. C), and a number to define the CATEGORY (e.g. C2).

In addition, for industry use, each sequence has a two-digit number to identify the YEAR of implementation of that severity level (e.g. A3/B4-21).

Classes may be added in future if, for example, Natural Gas engines, H₂ Combustion engines or engines which operate with alternative Fuels (E-fuels), may prove to require oil characteristics which cannot readily be incorporated into existing classes.

The CATEGORY indicates oils for different purposes or applications within that general class, related to some aspect or aspects of the performance level of the oil. Typical applications for each category are described in the Light-Duty and Heavy-Duty Sequence documents for guidance only. Specific applications of each category are the responsibility of the individual motor manufacturer for their own vehicles and engines. Oils within a category may also meet the requirements of another category but some engines may only be suited to oils of one category within a class.

The YEAR numbers for ACEA Sequence is intended only for industry use and indicates the year of implementation of that severity level for the particular category. A new year number will indicate, for example, that a new test, parameter or limit has been incorporated in the category to meet new / upgraded performance requirements whilst remaining compatible with existing applications. An update must always satisfy the applications of the previous issue. If this is not the case, then a new category is required.

An administrative ISSUE Number is added for industry use where it is necessary to update the technical requirements of a sequence without the intention to increase severity (e.g. when a CEC test engine is updated to the latest version whilst maintaining equivalent severity; or where a severity shift in the test requires modification of the specified limits.).

Where claims are made that Oil Performance meets the requirements of the ACEA Oil Sequences (e.g. product literature, packaging, labels) they must specify the ACEA Class and Category (see Nomenclature & ACEA Process for definitions).