By Appointment to
Her Majesty the Queen
Lubricant Blenders & Paint Suppliers
Witham Oil & Paint Ltd, Lincoln

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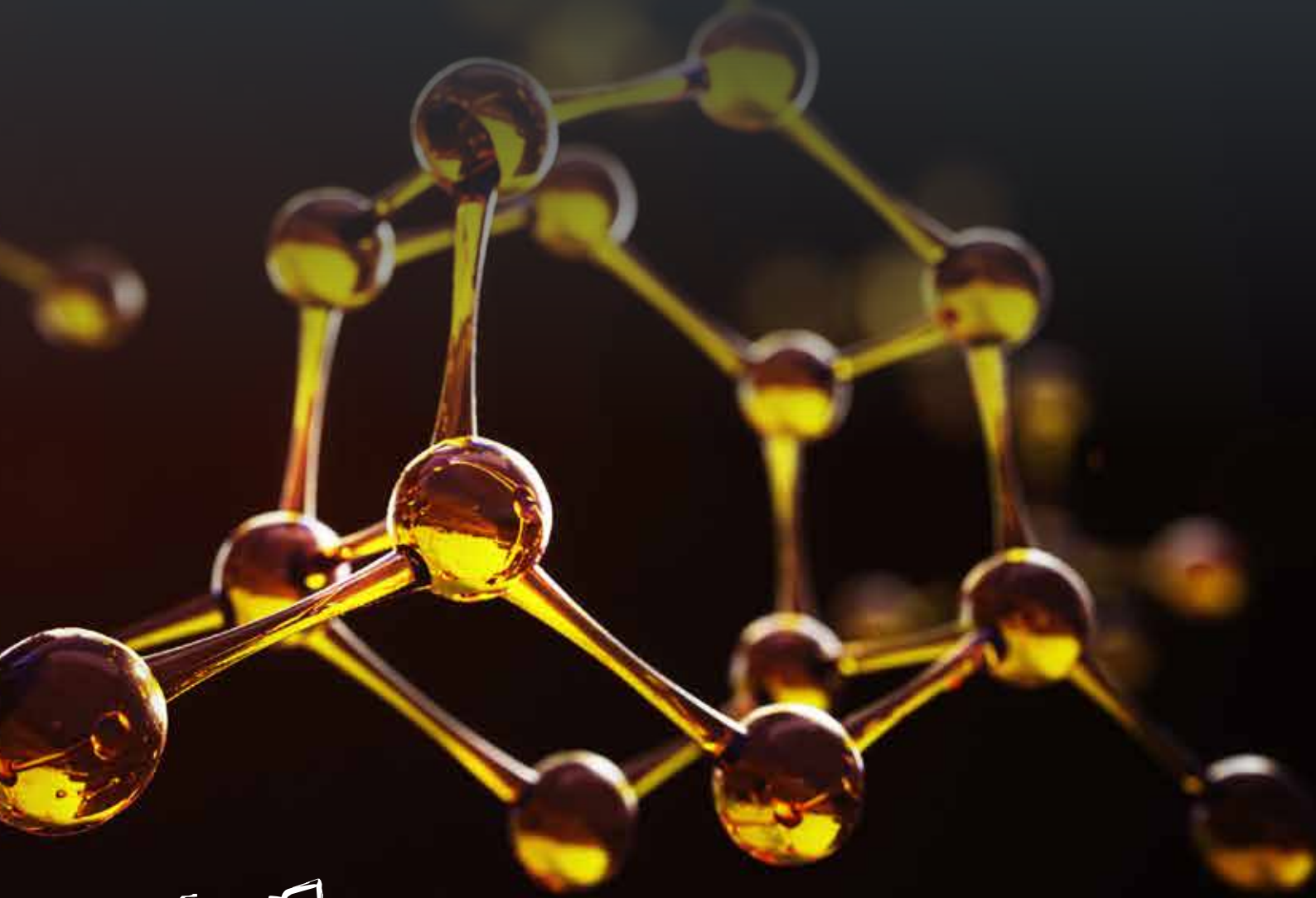
LUBRICANT

TECHNICAL INFORMATION



Blending Quality, Value & Service since 1921

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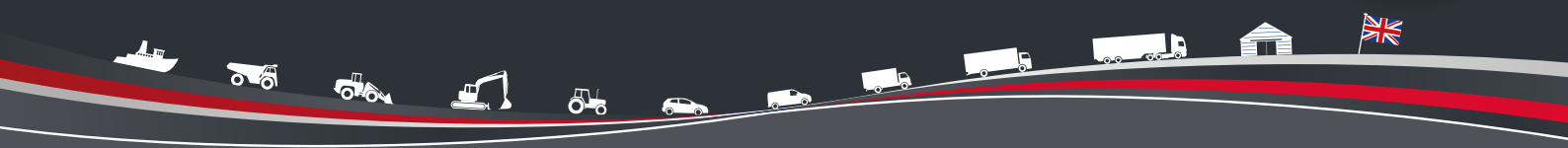
LUBRICANT FUNDMENTALS

TECHNICAL SUPPORT



Engine oil is the lifeblood of an internal combustion engine, without a good supply of quality oil an engine will destroy itself in seconds. The engine oil's primary job is to lubricate the moving parts. It does this by forming a thin film over the machined surfaces of the engine's components to prevent them from actually touching each other, and therefore causing friction, wear and damage. Lubricants however do more than lubricate – they prevent corrosion, take heat away from the combustion chambers aiding the cooling system, and remove any potentially damaging dirt particles from the engine by transmitting them to the oil filter. As the engine oil reduces the friction between engine components, it also affects the fuel economy and even improve the engine's power output if the correct oil is used.

One of the most important aspects in manufacturing reputable lubricants, is the quality of the raw materials that you start with. The "ingredients" that we use are second to none, which is why our products meet the latest and highest Original Equipment Manufacturers approved requirements. They are designed to advance both the performance of the machinery as well as reduce the emissions, maintenance, and wear and tear of the working parts. Driving further efficiencies in fuel economy our technical teams work hard in their laboratories to ensure the latest technologies maximise results whatever the application.

ADDITIVES

Oil additives are chemical compounds that improve the lubricant performance of base oil (or oil 'base stock').

Additives have three basic roles:

- Enhance existing base oil properties with antioxidants, corrosion inhibitors, anti-foam agents and demulsifying agents.
- Suppress undesirable base oil properties with pour-point depressants and viscosity index (VI) improvers.
- Impart new properties to base oils with extreme pressure (EP) additives, detergents, metal deactivators and tackiness agents.

Additives come in a wide and varied selection, but all have one common objective, to enhance certain desirable characteristics in a fluid and reduce to impact of the undesirable characteristics. Some of the most common are listed below together with their primary purpose within the finished lubricant.

VISCOSITY MODIFIERS Allow the lubricant to cover and maintain a viscosity range that would not be possible otherwise.

DISPERSANTS Prevent soot and other combustion by products and contaminants congealing and creating sludges.

DETERGENTS Ensure that carbon deposits and varnishes cannot form and keep internal components clean.

BN BOOSTER BN refers to Base Number which is effectively the ability of the lubricant to neutralise acidic compound created by the fuel combustion process.

ANTI-OXIDANTS As the name suggests these help the lubricant resist oxidation.

PPD (POUR POINT DEPRESSANTS) These help the lubricant operate at a lower temperature than it could otherwise, the "pour point" of a lubricant is exactly that, the point at which the lubricant ceases to pour.

ANTI-FOAM Foam can lead to excessive oxidation; these additives help drastically reduce its formation.

FRICTION

Friction is a force between two surfaces that are sliding, or trying to slide, across each other. Friction always works in opposition, resisting the direction in which the object is moving. Friction produces heat and always slows a moving object down; brakes are an excellent example. The objective of a lubricant is to control or, as much as possible eliminate this friction, thereby allowing the surfaces to slide whilst also dissipating heat.

MINERAL, SYNTHETIC AND SEMI-SYNTHETIC OILS

MINERAL OIL is oil that came out of the ground and has then been refined to make it suitable for use in vehicles. During the refning and processing, impurities are removed. Mineral oils are ideal for older vehicles that were developed to run on less technologically advanced lubricants, which can actually have adverse effects on older gaskets and seals.

SYNTHETIC OILS are man-made,and designed with specific properties to meet the exact demands of modern engines and conditions. This makes them more expensive to produce due to a more complex manufacturing process, but because they are tailor-made they provide the best performance, protection and fuel economy. They also remain stable at very high temperatures and fluid at very low temperatures.

SEMI-SYNTHETIC OILS are a blend of mineral and synthetic oils. They provide better performance, protection and fuel economy than mineral oils, but not as good as a full synthetic. Most cars on the road today will use at least semi-synthetic oil, with more modern engines designed to make use of fully-synthetic oils and technology.

All oil types are not suited to all engines. So before choosing between standard mineral oil, semi-synthetic oil or synthetic oil, it is important to follow your vehicle manufacturer's recommendations.

MONOGRADE OILS

Monograde oils are, as the name again suggests, single grade lubricants. They contain no specific chemistry to allow them to span multiple viscosity grades. These types of oil are often used in classic and vintage applications that pre-date the introduction of multigrade lubricants.

MULTIGRADE OILS

As the name suggests fluids of this type cover multiple grades so how is this possible? A fluid can only be one viscosity at any given temperature, understanding this helps better understand multigrade oils. Viscosity modifiers are the chemistry that allows a fluid to span the viscosity properties of two different grades.

Two numbers will usually appear on a label separated by a "W" meaning winter, an example would be 5W-30. So simply put the lubricant needs to be a low enough viscosity to be pumped around the engine and start protecting the internal components when cold but also ensure that at the running temperature of the engine the lubricant is viscous enough to also provide that same protection. The first number indicates the lubricants cold temperature viscosity characteristics, the second its operating temperature viscosity characteristics. The viscosity is measured according to the SAE J300 standard (see below) and must meet tight limits to comply.

STANDARDS & SPECIFICATIONS

Standards are important to all lubricant products. They help ensure the customer knows what they are buying and helps compare the different types of oil available. When a lubricant is given a standard it is based on a number of 'qualities and performance properties' that the lubricant possess or how they perform for things like, fuel economy, wear, soot build up, sludge and oxidisation. Different standards are used in different parts of the world and there are different standards for cars and motorbikes.

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LUBRICANT FUNDMENTALS

TECHNICAL SUPPORT

CONTINUED...

There are a number of worldwide technical organisations involved in the formulation of lubricant standards that issue, maintain and police specifications. Their job is to produce specifications that will protect and maintain the engines of the vehicle throughout its lifetime.

ACEA (EUROPEAN AUTOMOBILE MANUFACTURERS ASSOCIATION)
This bodies membership includes all the major European vehicle makers both passenger car and commercial. They are responsible, with input from the additive & base oil manufacturers for agreeing and setting the engine lubricant standards for use in their vehicles. These tests are periodically reviewed and re-published around every two years and are known as "sequences". Lubricant blenders and suppliers are required to sign a letter of conformance allowing them to quote the ACEA specifications on labels and product information.

ACEA specifications are all prefixed with a letter and then a number, for example you may see in a vehicle handbook a phase like "A 5W-30 viscosity grade lubricant meeting the specification ACEA A3/B4".

The prefix A indicates that the specification is designed for gasoline engines, and the B indicates a diesel engine. Many modern engine oils are capable of meeting multiple ACEA specifications simultaneously. The number relates to the category within that class and will have different physical and chemical limits.

So ACEA A3 is for a petrol engine that requires the characteristics of a class 3, the same is true for the B4.

The ACEA classifications relate to:
- A/B Categories Petrol & Light Duty Diesel Engines
- C Categories, Petrol & Light Duty Diesel Engines with Exhaust After treatment Devices
- E Categories and Heavy-Duty Diesel Engines.

API (AMERICAN PETROLEUM INSTITUTE) This association produces the lubricant specifications for the US and South America. As with ACEA the major vehicle manufacturers, additive & base oil manufacturers produce lubricant specifications for this market.

API specifications are prefixed with a two letters such as API SN or API CI-4, as with the ACEA specifications the first letter denotes the type of engine its designed for and whilst the following is not the actual meaning of the letters it sometimes helps to think "S" spark- petrol & "C" compression-diesel to remember which relates to which.

Whilst API specifications are more common in the UK when specifying gear oils (API GL-5) they are not unknown in the handbooks of imported vehicles. Many modern lubricants can claim both ACEA & API specifications on the same product.

Both ACEA and API periodically update their specifications to keep pace with changing engine design and legislation, these updates are however handled slightly differently by each body.

ACEA issue an updated sequence containing the new chemical and physical limits but do not alter the naming convention. They also remove and add new specification in reaction to changes in engine design or legislation and the latest are the 2016 sequences, the industry then formulates to these new specifications.

SAE (SOCIETY OF AUTOMOTIVE ENGINEERS) This association produces a huge range of standards but as far as the lubricants industry is concerned the most common is the SAE J300 & 306. These standards detail the viscosity limits for engine & gear lubricants and ensure consistency across globe.

JASO (JAPANESE AUTOMOBILE STANDARDS ORGANISATION) This industry organisation is responsible for setting specifications for lubricants across a broad range of Japanese hardware. JASO small engine specifications are broadly recognized and have been adopted globally by the industry as key performance standards for both 2-stroke and 4 stroke applications.

ILSAC (INTERNATIONAL LUBRICANTS STANDARDISATION AND APPROVAL COMMITTEE) This is an organization through which Ford, General Motors, Chrysler and the Japanese Automobile Manufacturers Association, Inc. (JAMA) develop minimum performance standards for passenger car engine oils used in petrol fuelled engines. There specifications are based upon API's but with additional performance and fuel economy requirements.

OEM (ORIGINAL EQUIPMENT MANUFACTURER) Many manufacturers, in addition to quoting the specifications above almost always have their own lubricant specification. These are usually based upon one of the industry standards with additional or more stringent limits in some areas. It is common for a lubricant to carry both industry and OEM specifications on a single product.

VISCOSITY

The viscosity of a fluid is a measure of its resistance to flow. For liquids, it corresponds to an informal concept of 'thickness': for example, gear oil has a higher viscosity than automatic transmission fluid. As far as lubricants are concerned viscosity is reduced as temperature rises and increases as temperature reduces. Please click on the video below for more information on oil Viscosity.

This is achieved with the use of viscosity modifiers and pour point depressants which act together to give the finished lubricant the characteristics of a 5 grade when cold but a 40 grade when at running temperature. We measure that the finished lubricant meets these physical limits by using two pieces of equipment CCS (Cold Crank Simulator) measures the 5W part and chills the sample down to -30C. Once at this temperature the viscosity is measured and must fall below a maximum viscosity specified in the SAE J300 classification. This, as the name suggests simulates the lubricants ability to flow at low temperatures when the ignition is turned on by the driver.

We run tests on every batch of engine oils, depending on the product are:
- MRV (Mini Rotary Viscosity) basically the pumpability and yield stress of a lubricant.
- Titration which measures the lubricant ability to neutralize acidic compounds produced by fuel combustion ensuring they cannot corrode the engines internal components.
- NOACK Volatility simulates the evaporation loss that the lubricant will be subject to during its life, to preserve the viscosity integrity.
- HTHS (High Temp/High Shear) A measure of the lubricants resistance to flow under conditions resembling highly-loaded journal bearings inside the engine.
- Sulphated Ash measures residual ash and the test involves subjecting a sample to 700C in a muffle oven until only ash is left. This is further processed with acid and finally weighed and must fall under a certain level. Sulphated ash levels are critical in protecting the sophisticated after treatment devices fitted to many vehicles.

ICP Analysis (Inductively Coupled Plasma) measures the elementals within the oil or its chemical footprint to ensure the limits are within specification. The test involves introducing a diluted sample of the lubricant into a torch burning at around 10,000K which instantly vaporises it. The machine can then determine from the wavelength and frequency of the emitted light the exact element and concentration.

VISCOSITY INDEX

Viscosity Index, often referred to in the lubricants world as (VI) is a number used to express how much a fluids viscosity changes relative to temperature. The less it changes across a range of temperatures the higher the VI. Viscosity Index Improvers (VII) are extensively used within lubricant formulations to increase the VI of a fluid.

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LUBRICANT SPECIFICATIONS

ACEA EUROPEAN OIL SEQUENCES FOR SERVICE-FILL OILS

TECHNICAL SUPPORT

This page details the ACEA European Oil Sequences for Service – Fill Oils for Petrol Engines, light duty Diesel Engines, Petrol and Diesel engines with after treatment devices and for Heavy Duty Diesel engines. These sequences define theminimum quality level of a product for presentation to ACEA members. The Witham Group will always manufacture products relevant to the latest specifications and requirements from ACEA.

ACEA EUROPEAN OIL SEQUENCES FOR SERVICE-FILL OILS

A/B: PETROL AND DIESEL ENGINE OILS

A1/B1 Category is removed with these Oil Sequences.

A3/B3 Stable, stay-in-grade Engine Oil intended for use in Passenger Car & Light Duty Van Petrol & Diesel Engines with extended drain intervals where specified by the Engine Manufacturer, and for severe operating conditions as defined by the Engine Manufacturer.

A3/B4 Stable, stay-in-grade Engine Oil intended for use at extended Drain Intervals in Passenger Car & Light Duty Van Petrol & DI Diesel Engines, but also suitable for applications described under A3/B3.

A5/B5 Stable, stay-in-grade Engine Oil intended for use at extended Drain Intervals in Passenger Car & Light Duty Van Petrol & Diesel Engines designed to be capable of using Low Viscosity Oils with HTHS Viscosity of 2.9 to 3.5 mPa•s. These Oils are unsuitable for use in certain Engines - consult vehicle-OEM's owner's manual/handbook in case of doubt.

C: CATALYST COMPATIBILITY ENGINE OILS

C1 Stable, stay-in-grade Engine Oil with Lowest SAPS-Level, intended for use as catalyst compatible Oil at extended Drain Intervals in Vehicles with all Types of modern Aftertreatment Systems and High Performance Passenger Car & Light Duty Van Pertol & DI Diesel Engines that are designed to be capable of using Low Viscosity Oilswith a minimum HTHS Viscosity of 2.9 mPa•s.

C2 Stable, stay-in-grade Engine Oil with Mid SAPS-Level, intended for use as catalyst compatible Oil at extended Drain Intervals in Vehicles with all Types of modern Aftertreatment Systems and High Performance Passenger Car & Light Duty Van Gasoline & DI Diesel Engines that are designed to be capable of using Low Viscosity Oils with a minimum HTHS Viscosity of 2.9 mPa•s.

C3 Stable, stay-in-grade Engine Oil with Mid SAPS-Level, intended for use as catalyst compatible Oil at extended Drain Intervals in Vehicles with all Types of modern Aftertreatment Systems and High Performance Passenger Car & Light Duty Van Petrol & DI Diesel Engines that are designed to be capable of using Oils with a minimum HTHS Viscosity of 3.5 mPa•..

C4 Stable, stay-in-grade Engine Oil with Low SAPS-Level, intended for use as catalyst compatible Oil at extended Drain Intervals in Vehicles with all Types of modern Aftertreatment Systems and High Performance Passenger Car & Light Duty Van Petrol & DI Diesel Engines that are designed to be capable of using Oils with a minimum HTHS Viscosity of 3.5 mPa•s.

C5 Stable, stay-in-grade Engine Oil with Mid SAPS-Level, for further improved Fuel Economy, intended for use as catalyst compatible Oil at extended Drain Intervals in Vehicles with all Types of modern Aftertreatment Systems
and High Performance Passenger Car & Light Duty Van Petrol & DI Diesel Engines that are designed to be capable and OEM-approved for use of Low Viscosity Oils with a minimum HTHS Viscosity of 2.6 mPa•s.

SAPS: Sulphated Ash, Phosphorus, Sulphur	DPF: Diesel Particle Filter
HTHS: High Temperature High Shear Viscosity	GPF: Petrol Particle Filter
DI: Direct Injection	Three-Way Catalyst

OUR EXPERTISE

As expert manufacturers of thousands of lubricant products, the Witham Group has its own technical team and laboratory based at the Head Office in Lincoln. On a daily basis, products are tested, researched and developed to ensure that only high quality lubricants are made using the latest manufacturer's requirements. In addition, in house expertise and blending facilities mean that customer bespoke enquiries and ongoing product design and development remain at the heart of our ever changing environment.

PETROL ENGINES

The current and previous API Service Categories are listed here. Vehicle owners should refer to their owner's manuals before consulting these charts. Oils may have more than one performance level. For automotive petrol engines, the latest API Service Category includes the performance properties of each earlier category and can be used to service older engines where earlier category oils were recommended.

Note: The letters "SI", "SK", and "SO" have been omitted from the sequence of letter designations for API Service Categories because of their common association with other organizations or systems.

CATEGORY	STATUS	SERVICE
SP	Current	Introduced in May 2020, designed to provide protection against low-speed pre-ignition (LSPI), timing chain wear protection, improved high temperature deposit protection for pistons and turbochargers, and more stringent sludge and varnish control. API SP with Resource Conserving matches ILSAC GF-6A by combining API SP performance with improved fuel economy, emission control system protection and protection of engines operating on ethanol-containing fuels up to E85.
SN	Current	For 2020 and older automotive engines.
SM	Current	For 2010 and older automotive engines.
SL	Current	For 2004 and older automotive engines.
SJ	Current	For 2001 and older automotive engines.
SH	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1996. May not provide adequate protection against build-up of engine sludge, oxidation, or wear.
SG	Obsolete	CAUTION: Not suitable for use in most gpetrol-powered automotive engines built after 1993. May not provide adequate protection against build-up of engine sludge, oxidation, or wear.
SF	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1988. May not provide adequate protection against build-up of engine sludge.
SE	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1979.
SD	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1971. Use in more modern engines may cause unsatisfactory performance or equipment harm.
SC	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1967. Use in more modern engines may cause unsatisfactory performance or equipment harm.
SB	Obsolete	CAUTION: Not suitable for use in most petrol-powered automotive engines built after 1951. Use in more modern engines may cause unsatisfactory performance or equipment harm.
SA	Obsolete	CAUTION: Contains no additives. Not suitable for use in most petrol-powered automotive engines built after 1930. Use in modern engines may cause unsatisfactory performance or equipment harm.

API TRANSMISSION LUBRICATION SPECIFICATIONS

SPECIFICATION	DESCRIPTION	APPLICATION
GL-5	Oil with high EP (Extreme Pressure) additives-equivalent to MIL-L-2105D specification.	Hypoid gear wheels under very heavy stress.
GL-4	Oils with medium EP additives-equivalent to MIL-L-2105A specification.	Manual transmissions, hypoid gearboxes under moderate stress.
GL-3	Oils with anti-wear additives.	Manual transmissions, conical gearboxes under minor stress.
GL-2	Oils containing greasy materials.	Industrial transmissions for worn screws.
GL-1	Pure mineral oils.	Tractor and commercial vehicle manual transmissions. None EP.

DIESEL ENGINES

CATEGORY	STATUS	SERVICE
CK-4	Current	API Service Category CK-4 describes oils for use in high-speed four-stroke cycle diesel engines designed to meet 2017 model year on-highway and Tier 4 non-road exhaust emission standards as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulfur content up to 500 ppm (0.05% by weight). However, the use of these oils with greater than 15 ppm (0.0015% by weight) sulfur fuel may impact exhaust aftertreatment system durability and/or oil drain interval. These oils are especially effective at sustaining emission control system durability where particulate filters and other advanced aftertreatment systems are used. API CK-4 oils are designed to provide enhanced protection against oil oxidation, viscosity loss due to shear, and oil aeration as well as protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits, degradation of low- and high-temperature properties, and soot-related viscosity increase. API CK-4 oils exceed the performance criteria of API CJ-4, CI-4 with CI-4 PLUS, CI-4, and CH-4 and can effectively lubricate engines calling for those API Service Categories. When using CK-4 oil with higher than 15 ppm sulfur fuel, consult the engine manufacturer for service interval recommendations.
CJ-4	Current	For high-speed four-stroke cycle diesel engines designed to meet 2010 model year on-highway and Tier 4 non-road exhaust emission standards as well as for previous model year diesel engines. These oils are formulated for use in all applications with diesel fuels ranging in sulfur content up to 500 ppm (0.05% by weight). However, the use of these oils with greater than 15 ppm (0.0015% by weight) sulfur fuel may impact exhaust aftertreatment system durability and/or drain interval. API CJ-4 oils exceed the performance criteria of API CI-4 with CI-4 PLUS, CI-4, CH-4, CG-4 and CF-4 and can effectively lubricate engines calling for those API Service Categories. When using CJ-4 oil with higher than 15 ppm sulfur fuel, consult the engine manufacturer for service interval.
CI-4	Current	Introduced in 2002. For high-speed, four-stroke engines designed to meet 2004 exhaust emission standards implemented in 2002. CI-4 oils are formulated to sustain engine durability where exhaust gas recirculation (EGR) is used and are intended for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, CG-4, and CH-4 oils. Some CI-4 oils may also qualify for the CI-4 PLUS designation.
CH-4	Current	Introduced in 1998. For high-speed, four-stroke engines designed to meet 1998 exhaust emission standards. CH-4 oils are specifically compounded for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4, and CG-4 oils.
CG-4	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009.
CF-4	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009.
CF-2	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009. Two-stroke cycle engines may have different lubrication requirements than four-stroke engines, so the manufacturer should be contacted for current lubrication recommendations.
CF	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 2009. Later "C" category oils are usually suitable or preferred for diesel automotive engines for which "CF" oils were specified. Older equipment and/or two-stroke diesel engines, especially those calling for monograde products, may however require "CF" category oil.
CE	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
CD-II	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
CD	Obsolete	CAUTION: Not suitable for use in most diesel-powered automotive engines built after 1994.
CC	Obsolete	CAUTION: Not suitable for use in most diesel-powered engines built after 1990.
CB	Obsolete	CAUTION: Not suitable for use in most diesel-powered engines built after 1961.
CA	Obsolete	CAUTION: Not suitable for use in most diesel-powered engines built after 1959.
FA-4	Current	API Service Category FA-4 describes certain XW-30 oils specifically formulated for use in select high-speed four-stroke cycle diesel engines designed to meet 2017 model year on-highway greenhouse gas (GHG) emission standards. These oils are formulated for use in on-highway applications with diesel fuel sulfur content up to 15 ppm (0.0015% by weight). Refer to individual engine manufacturer recommendations regarding compatibility with API FA-4 oils. These oils are blended to a high temperature high shear (HTHS) viscosity range of 2.9cP–3.2cP to assist in reducing GHG emissions. These oils are especially effective at sustaining emission control system durability where particulate filters and other advanced aftertreatment systems are used. API FA-4 oils are designed to provide enhanced protection against oil oxidation, viscosity loss due to shear, and oil aeration as well as protection against catalyst poisoning, particulate filter blocking, engine wear, piston deposits, degradation of low- and high-temperature properties, and soot-related viscosity increase. API FA-4 oils are not interchangeable or backward compatible with API CK-4, CJ-4, CI-4 with CI-4 PLUS, CI-4, and CH-4 oils. Refer to engine manufacturer recommendations to determine if API FA-4 oils are suitable for use. API FA-4 oils are not recommended for use with fuels having greater than 15 ppm sulfur. For fuels with sulfur content greater than 15 ppm, refer to engine manufacturer recommendations.

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OIL STORAGE INFORMATION

TECHNICAL SUPPORT

Unfortunately oil is one of the most common reports of pollution, contributing to over 15% of pollution incidents each year. It can harm plants and marine life, damage rivers, groundwater and soil and destroy natural habitats and drinking water supplies.

OIL STORAGE SOLUTIONS

Here at Witham, we appreciate that oil needs to be kept safe and stored properly, not only because it is the law, but because it is the right thing to do. That is why we offer simple colour coded bulk storage tanks free of charge for customers who use our oil on a regular basis and wish to keep a clean and tidy workshop and help avoid spills and contamination of oil.

We can help advise on the best way to install the tanks which for standard sizes are free of charge. Your lubricants are filled up in the colour coded tanks as required. The tanks have sight gauges, taps or pumps and come labelled with the product name and its application. Simple, clean and easy to use, these tanks help keep your working space ship-shape, avoid spills from containers, helps avoid important oil contamination and helps the environment by using less packaging. They also help achieve important health and safety and oil storage requirements keeping users and the environment as safe as possible.

REGULATIONS OF OIL STORAGE

Did you know that Oil Storage Regulations require anyone in England who stores more than 200 litres of oil, to provide secure containment facilities for tanks, drums, Intermediate Bulk Containers (IBCs) and mobile bowsers. There are different regulations for England, Scotland and Northern Ireland.

Different regulations apply depending on where you store your oil or fuel, how much you store and what you are using the oil or fuel for. If you choose not to comply with these regulations, you can be served an anti-pollution works notice or face prosecution.

If you are a business and store more than 200 litres of oil or fuel, you must adhere to the Control of Pollution (Oil Storage) (England) Regulations 2001, which refer to:

Red Diesel • DERV • Kerosene • Biofuels • Lubricants or hydraulic oils • Synthetic oils e.g. waste oil and motor oil • Liquid bitumen-based products e.g. damp proofing or road surface products

WHERE SHOULD I STORE MY OIL AND FUEL?

Your tank must be stored at least 10 meters away from inland or coastal waters, away from areas that are at danger from flooding and 50 meters clear of a spring to avoid the risk of pipelines breaking and causing an oil spillage.

Your tank should be on floor level or below ground level – it must never be stored above roof level. Remember, your tank needs to be easily accessed for deliveries and maintenance, but away from areas that are at risk of damage via impact, machinery and weather.

If you have any questions about the storage of your oil or would like to talk to someone about installing bulk storage tanks then please call your local depot and we will be able to offer further advice.

FURTHER INFORMATION ABOUT OIL STORAGE

Environment Agency

For further information on all oil storage requirements and to read the full relevant UK Government regulations please visit: www.gov.uk/guidance/storing-oil-at-a-home-or-business

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HOW TO CHOOSE THE RIGHT OIL

TECHNICAL SUPPORT

WE'RE HERE TO HELP!

Choosing the right oil for your vehicles engine is vital, our technical experts are here to help with all your lubricant questions.

Oil is the lifeblood of your engine and knowing which lubricant is right for which vehicle or which part of your vehicle, is crucial. The lubrication demands and expectations in vehicles and machinery today is now greater than it has ever been. Wide ranging specifications in engine oils, transmissions, gear oils, brake fluids, hydraulic oil or coolants mean it's hard to keep up with what oils are required.

Unfortunately if you don't get the right oil, the consequences are both costly and inconvenient. So using the right quality oil and finding the right type of lubricant for the different types of manufactured equipment and machinery is absolutely vital.

Our easy to use online lubricant finder will help you find the right oil and all the associated lubricants for your car, commercial vehicle, agricultural machinery and more, easily and quickly. All our Witham lubricants are made to the latest OEM requirements and meet the latest ACEA and API recommendations and specifications, so you can be sure the quality of product you put in your vehicle is reliable and trustworthy.






CLICK HERE FIND THE RIGHT OIL...

Try our specialist online Lubricant Finder to find recommended lubricants for your vehicles. Using the right oil:

LUBRICANT FINDER – THE WITHAM GROUP

- IMPROVES FUEL ECONOMY
- SAVES DOWNTIME IN THE FIELD
- HELPS YOUR MACHINERY LAST LONGER
- PREVENTS WEAR AND TEAR
- REDUCES CO2 EMISSIONS