



MILLERS OILS



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CLASSIC AND CLASSIC SPORT RANGE
FROM MILLERS OILS



www.millersoils.co.uk/classic



Dispelling the myths around synthetic oil in classic vehicles

In the Millers Oils classic range there are a number of different types of engine oils which include mineral, semi synthetic and fully synthetic blends. Each is specially developed to suit classic vehicles, the protection of them and their requirements.

In the past there was concern around the use of synthetic oil in treasured classic vehicles but modern technology has shown that this worry is misplaced.

Read inside to find out more

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PROUDLY ENGINEERED IN BRIGHOUSE, YORKSHIRE

SINCE 1887

What is synthetic oil?

It starts when crude oil is extracted from the ground and is sent to a refinery to undergo a refining process; this is known as fractionation and it is where impurities are removed from the crude. The base oil produced from this process is called mineral oil and has a range of characteristics ideal for different applications.

There are different base oil groups which identify the process the base oil has undergone. The API (American Petroleum Institute) categorises base oils into five categories with the first three being refined from petroleum crude oil. API group 1 mineral oils are distilled and solvent refined to remove waxes. API group 2 and 3 are hydrogen treated to remove impurities, such as sulphur and double bonds where oxidation can occur. API group 3 oils have very similar characteristics to synthetic oils and are produced by mineral refining with chemical treatment. Synthetic group 4 oils are made from Poly Alpha Olefins [PAO] and known as "man-made oils" which have no impurities and have been chemically designed to offer superior properties.

Additives are added to the base oil to deliver enhanced performance functionality appropriate to different engine specifications. Semi synthetic oils are a mixture of mineral and synthetic base stocks. The group 5 classification covers all other base oils which fall outside of groups 1 to 4.

The reason behind the reluctance of using synthetic oils in a classic vehicle

In the late 1990's synthetics were a new and increasingly popular technology and oil companies were starting to use group 4 synthetic base oil in their classic oils.

Back then, this caused issues as the oils then were not fully compatible for classic vehicles with seals designed to be used with mineral oils. The non compatible oil could be aggressive with the rubber seals and cause them to perish and weep leading to leaks. These are not issues you wish to hear about as a classic vehicle owner.

However, fear not, these issues are a thing of the past. We now know much more about synthetic oils. After researching into synthetic technologies and additives Millers Oils are able to provide products for classic vehicle that not only eradicate the past issues but further protect your vehicle and have the potential to enhance performance. At Millers Oils, the synthetic oils in the classic range have no detrimental impact to engines or negative impact to seals and their performance or longevity. In fact there is a multitude of benefits for your treasured vehicle which comes from using one of the synthetic oils from our classic range.



So what are the benefits?



- ✓ Using a semi or fully synthetic oil is advantageous to a classic vehicle as you are guaranteeing more protection to high stress/wear areas and extending the longevity of vital components.
- ✓ Oils using synthetic technology are far more stable and offer better low and high temperature performance; this is linked to the oil having better stability through all conditions.
- ✓ They can provide a stronger film thickness leading to a higher level of protection.
- ✓ Synthetics are less prone to oxidation chemical breakdown of the oil and in like for like conditions would have longer life expectancy than a mineral oil.

Which Millers Oils classic oil suits your vehicle?

Classic Pistoneeze 20w50

Where to use?

This oil is ideally suited to classic vehicles taken on drives of a shorter duration and less regularly, especially beneficial where oil consumption is an issue. This product is also suitable for vintage cars incorporating a modern filtration system.

What are the benefits of using this product?

- Mineral oil - if the owner wants to keep the oil period correct.
- The modern technology means the oil will meet up to date specifications along with any 'period' performance requirements.
- Incorporates modern additive technology with period viscometrics to provide the optimum lubrication characteristics.
- Formulated with optimum amounts of ZDDP for ultimate protection.

Classic Sport 20w50

Where to use?

Classic Sport 20w50 (semi synthetic) is an upgrade from Classic Pistoneeze 20w50 (mineral), with its synthetic properties and higher level of ZDDP. For use in both classic and classic sport vehicles especially if they are used for longer drives and used in more arduous conditions.

What are the benefits of using this product?

- Semi synthetic – ideal step up from a mineral oil.
- Incorporates modern additive technology with period viscometrics to provide the optimum lubrication characteristics.
- Formulated with optimum amounts of ZDDP for ultimate protection.
- Incorporation of high levels of synthetic based fluids provide dramatically increased protection under harsh conditions.
- Reduced oil consumption compared to mineral oil.

Classic Sport 20w60

Where to use?

For use in both classic and classic sport vehicles that are suffering with low oil pressure.

What are the benefits of using this product?

- Semi synthetic.
- Higher viscosity than the 20w50 grades, this thicker oil boosts oil pressure back up to desired limits.
- Incorporates modern additive technology with period viscometrics to provide the optimum lubrication characteristics.
- Formulated with optimum amounts of ZDDP for ultimate protection.
- Incorporation of high levels of synthetic based fluids provide dramatically increased protection under harsh conditions.
- Reduced oil consumption compared to mineral oil.

Classic Sport High Performance 20w50

Where to use?

If you are using your classic sport vehicle competitively, take part in track days or long drives and touring where vehicle performance, protection and mechanical gains are vital under extreme conditions.

The science behind it

This product was developed from the success of NANODRIVE technology in our motorsport range. This low friction technology works hand in hand with the chemistry of a conventional oil to reduce the coefficient of friction and has proven itself on the world motorsport stage. A synthetic oil is perfect for competing vehicles needing that extra care as it provides top level protection and a superior oil film thickness.

What are the benefits of using this product?

- Fully synthetic oil.
- Incorporates modern additive technology with period viscometrics to provide the optimum lubrication characteristics.
- Fully compatible with seals.
- A substantial reduction in friction & wear.
- Significant power and torque gains.
- Formulated with optimum amounts of ZDDP for ultimate protection.
- Improved fuel economy.
- Marked reduction in heat generation aiding the cooling effect on the engine.
- Reduced oil consumption compared to semi synthetic or mineral oil.