LUBRI NEWS

THE OFFICIAL MORRIS LUBRICANTS NEWSLETTER

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MORRIS LUBRICANTS

Racing driver Lydia learns how to get Your Vehicle Ready for Winter

Lydia Walmsley, racing driver and Morris Lubricant Ambassador, has been catching up with Morris Lubricants technology manager, Adrian Hill, to find out how to get your car ready as the colder months return. So, what are the top tips for driving in the winter months?

When it comes to safety, a clear windscreen, correct tyre pressures and a fully operational braking and steering system are critical and could save you from an accident, injury or worse and save other road users from the same possible fate.

For windscreens, Adrian recommends the use of a good quality screenwash at the maximum dilution rate of 50% (half water / half screenwash).

A good screenwash such as Morris Lubricants Workshop Pro All Seasons Screenwash will not only help clean the screen, removing all the mess that winter road surfaces throw up at the car - salt, mud, etc - but it will also stop the water in the mixture from freezing when temperatures start to plummet.

Some screenwash products come pre-diluted so check before you dilute.

Brake fluid will always be changed, if scheduled, during a routine service. However, it's worth checking the brake fluid level when the bonnet is up. If the fluid level has dropped below the minimum fill level, take steps to top up with the correct fluid type as specified for that vehicle. This will ensure that the brake system will work effectively, especially if there are electronic controls fitted, such as ESP for example. These systems will definitely help you to stop safely if road surfaces are slippery or muddy. Morris Lubricants has a range break fluids so it is best to check with our technical team or use whatoildoineed.com to find out the perfect brake fluid for your vehicle.

When it comes to tyres, it is critical to ensure that they are inflated to the correct pressure as indicated in the vehicle's handbook. This will ensure the handling of the vehicle will not be affected. Of course, this applies all year round, not just winter. If road surfaces are slippery, over inflated tyres, especially on the front, can impair the vehicle's steering responsiveness.

The power steering system also relies on the correct level of fluid to ensure positive and smooth operation. The power steering reservoir should be easily located with markings showing minimum and maximum levels. If the fluid requires topping up, again ensure the correct type of power steering fluid is added. Positive steering response in harsh driving conditions can help prevent accidents.

Morris Lubricants has a variety of power steering fluids so it is best to check with our technical team or use whatoildoineed.com to find the correct product for your vehicle.

Maintaining the correct fluid level and dilution strength of antifreeze/coolant mixtures is vitally important to ensure no internal damage occurs within the engine. When water freezes, it expands and this is what causes the damage. A worst case scenario could be a cracked cylinder head or blockage.

The vehicle handbook will indicate the type of antifreeze/coolant you should use and the dilution rate to ensure maximum frost and freezing protection. This is usually a 50:50 mixture, preferably with distilled or de-ionised water to prevent the deposit of hard water salts (furring).

Then, of course, there is the oil level. Ensuring that the oil level never falls below minimum, but is always maintained at the maximum mark on the dip stick, will provide the engine with the best operational environment. Checking the oil level should form part of a regular maintenance regime.

Always follow the correct service interval guidelines for when the oil needs to be changed and always use an oil with the correct performance level, even for topping up. This will ensure the engine and any after-treatment devices are protected fully, under all driving conditions in all weathers. Speaking to our technical team or visiting whatoildoineed.com, you can find the right oil for your engine as well as the correct volume you need to use.

In summary, your regular maintenance checks will keep you safe and prevent any unnecessary damage to your vehicle's engine and systems. If you are unsure of which fluids and their specifications are required for your vehicle, Morris Lubricants can help.

Top five maintenance tips for farmers with tractors

Farmers are advised to put oil, lubricant and grease performance ahead of price as they prepare their tractors for the new season.

With rising prices, such as the steep increase in fertiliser costs having a significant impact on the sector, it can be tempting to look for short term savings elsewhere.
In a market dominated with cheap imports, choosing an alternative oil to the manufacturer's specification, at a lower price, may seem like a sound investment.

However, says Adrian Hill, Morris Lubricants' Technology Manager,

Selecting the wrong, and usually, an inferior quality oil, may result in significant, long-term consequences to equipment performance and in the end an overall increase in running cost.

Adrian outlines the company's top tips for farmers as they prepare their vehicles for the new season.

AGRIMAX
SUPERIOR QUALITY AGRICULTURAL OILS

QUALITY FIRST

Modern tractor engines are now designed to meet Stage V emissions compliance for off-highway vehicles, to meet the latest emissions legislation. These will include after treatment devices, such as AdBlue systems, diesel oxidation catalysts and diesel particulate filters, to limit harmful particulate matter and NOx emissions.

Selecting the correct, high-quality oil will more than pay for the higher purchase price in the long run. For example, an incorrectly specified engine oil can block these catalysts or filters, potentially leading to significant remedial costs in the region of £3,000 or more for the replacement part, plus the additional cost of the repair and downtime itself.

SERVICE INTERVALS

Investing in a new or modern tractor is a significant capital expense, and farmers and farming contractors need the assurance that the tractor will perform reliably over many years. After the initial three-year manufacturer's service schedule, some owners may choose to delay future servicing, but this can prove a false economy. Engine oil over time may start to degrade, causing damage to vital engine components, so it is always advisable to meet the manufacturer's recommended service intervals.

RIGHT OIL FOR THE RIGHT JOB

Some older machinery may have always operated reliably using a universal tractor oil, but modern diesel particulate filters in particular can be sensitive to these universal oils. Instead, farmers should ensure they are using the correct oils for both the engine and the transmission (back end) systems.

SEEK TECHNICAL ADVICE

Machinery downtime is not only costly but can damage reputation if stock or deliveries are affected. Seeking professional advice regarding the correct engine oil specification, or service intervals, will always pay dividends. Morris Lubricants has a dedicated team of experts to provide the latest oil, lubricant and grease recommendations for a wide variety of agricultural vehicles and equipment. Whether it's a tractor, combine harvester, mini digger, all terrain vehicle (ATV) or any other agricultural machinery, the Technical Team have the appropriate solution to keep your vehicles out working in the field, rather than stuck in the workshop. You can contact Adrian and his team of experts on (01743 237541) or email technicalhelpdesk@morris-lubricants.co.uk.

GUIDED BY PERFORMANCE

"The fifth and probably the most important tip is to be guided by performance and not purchase price. This will ensure that farmers do not need to spend additional budget, at a time when costs are already at a premium, on unnecessary repair work." Adrian concludes,

"Choosing the right engine oil for the right tractor is a key part of the equipment lifecycle. It should be seen as a cost-effective and proactive means of protecting engine performance and ensuring equipment longevity.

ABOUT THE AGRIMAX RANGE

Agrimax is an innovative range of advanced multifunctional lubricants for the agricultural industry, manufactured at the Morris Lubricants facility in Shrewsbury.

Agrimax is designed to help reduce downtime, improve fuel efficiency and contribute to the reduction in engine emissions.

Visit morrislubricants.co.uk for more information.

Pedal power raises more than £3,500 for children's hospice

Four employees from across the company got on their saddle and used pedal power to raise more than £3,500 for Hope House and Tŷ Gobaith children's hospices, after completing a gruelling 125-mile sponsored cycle ride.

Owen Lloyd (Purchasing Department), Kim Marmaras (Production Department), Billy Salter (Production Department) and Dan Stanley (Marketing Department) cycled the 125-mile route on one of the hottest days of the summer, as the temperature exceeded 30°C in the latter parts of the challenge.

Morris Lubricants' executive chairman, Andrew Goddard, joined the four cyclists for the final four-mile leg of the ride, pedalling a vintage bread delivery bike that was used when the company's founder James Kent Morris ran a grocery shop in Shrewsbury.

hope house tŷ gobaith
children's hospices

Around 12 hours after leaving Morris Lubricants' offices and factory in Shrewsbury, the cyclists were greeted on their return by cheering workmates who had stayed after work to see the team cross the finish line.

The team had set off at 5am heading to Stanmore Hall Touring Park, near Bridgnorth, then onto Ludlow Touring and Holiday Park and then further onto Bow House Country Park near Bishops Castle.

The next section saw the cyclists then make the 33-mile journey to Hope House in Morda, near Oswestry where they were greeted by staff and children, before heading for Oxon Hall Touring Park on the outskirts of Shrewsbury, where they linked up with Mr Goddard for the final leg.

All the touring and holiday parks visited are owned by Morris Lubricants' sister company, Morris Leisure, whose Managing Director Edward Goddard greeted the cyclists at Oxon Hall Touring Park. Morris Lubricants' Directors Diana and David Goddard were also there to cheer them on.

The sponsored ride is one of a series of fundraising events being held this year by Morris Lubricants to support Hope House and Tŷ Gobaith children's hospices, the companies' adopted charity for 2022.

Owen Lloyd said: "None of us had come close to cycling this distance before and it was big feat to complete the 125 miles. It was a tough ride but really enjoyable and we had great team spirit.

"Colleagues in a support vehicle kept us hydrated with drinks and each of the touring and holiday parks we visited had laid on food and drinks which really helped push us on.

"Meeting one of the children at Hope House gave us the energy to complete the ride and we are all delighted to have raised more than £3,500."

Andrew Goddard said: "It was a brilliant achievement by the four cyclists in very hot and energy-sapping weather conditions. They really are heroes and did the company proud in raising a fantastic amount of money for such a wonderful charity.

"The four miles I did at the end was really nothing in comparison to what they did, although I found wearing a flat cap was not the best idea in the heat, but I did manage to deliver a basketful of bread on time for the staff to take home!

"Thank you to everyone who supported them on their journey and with donations".

Bekki Fardoe, area fundraiser for Hope House and Tŷ Gobaith, added: "We cannot thank the cyclists enough for completing their amazing challenge in the heat. We are hugely grateful for their support, particularly at a time of rising costs for everyone.

"Without the support of people like them and companies like Morris Lubricants and Morris Leisure, we simply would not be able to be here for the seriously ill children and the families that need us."

OTHER CHARITY EVENTS

Colleagues from around the company also took part in a charity football match and family fun day, raising funds for Hope House and Tŷ Gobaith Childrens Hospices.

Avid footballers from across the company played against the Greenhous team, a car and CV franchise dealer, also based in Shrewsbury.

It was a real battle of tactics with some fancy footwork and with each team having plenty of chances in front of goal. After a very hot, hard fought 90 minutes, the game finished 5 – 5 so the glory and the trophy were shared.

After the game the celebrations continued with a family fun day including bouncy castle, barbecue, bar, raffle and entertainment throughout the course of the day.

Andrew Goddard, Executive Chairman of Morris Lubricants, commented: "It's hard to believe that it has been three years since the last time we played, so we couldn't have been more excited to organise the game and fun day. The team had a fantastic time representing Morris Lubricants and playing against another great local business, whilst supporting a wonderful charity like Hope House and Tŷ Gobaith at the same time."

Did you know that Morris Lubricants supplies grease?

Yes that's right, Morris Lubricants provide an extensive range of high-performance greases, that have many different benefits and can be used in a wide variety of applications. So whether you need a general multipurpose grease or one for a specific application, Morris Lubricants has the product range to help meet the requirement of the task in hand.

WHAT ENVIRONMENTS ARE THE GREASES DESIGNED FOR?

The Morris Lubricant range of high-performance greases have properties and benefits specially designed for:

1. Adverse conditions
2. Extreme operating temperatures
3. Anti-friction
4. High shock loading
5. Water resistance

WHERE CAN I USE THE GREASES?

The range of greases can be used in many different industries including automotive, commercial vehicle, agriculture, off-highway, industrial, power generation, heritage, steam, rail, marine, motorcycle, motorsport and even horticulture.

Available in various sizes ranging from easy to apply aerosols sprays to 400gm cartridges, 500gm tubs, 3kg tins, 12.kg kegs and 180kg barrels, there is a Morris Lubricant pack size of grease to meet the need.

SO HOW DO GREASES WORK?

Greases are a complex mixture of thickeners, base oils and additives and have specific roles to play in the lubrication of equipment. They act as lubricant reservoirs which can reduce maintenance frequency, provide high load carrying capacity and, in some cases, reduce noise and vibration. Greases can provide an effective seal against environmental contamination, eliminate dripping and leakage and allow additional flexibility in the design and construction of mechanical systems.

The composition of a grease can be tailored to suit a variety of applications. By choosing the appropriate thickener, base oil type and enhancing this further with additive chemistry, optimum protection can be achieved.

A grease can be used at extremely high temperatures, low temperatures, in the presence of water, where there's sliding contact, where there's incidental food contact or where fire resistance is required and so on.

Finally, greases can look very different in appearance, but the differing colours can be purely cosmetic and have no bearing on the performance of the grease. If there is any uncertainty about the type of grease required for any particular application, always seek technical advice and guidance.

For more information on Morris Lubricants' extensive range of greases, please visit morrislubricants.co.uk

Learn How Oil Is Used With Guy Martin

Following Guy Martin's visit round the Morris Lubricants production facilities to learn 'How Oil Is Made', Guy now explores 'How Oil Is Used' in agricultural vehicles and farming equipment.

As Guy Martin is a farming contractor, mechanic and avid tractor user, Morris Lubricants' Technology Manager, Adrian Hill, went to Guy's workshop to show him why it is so important to select the correct oil for any type of tractor, agricultural vehicle or farm machinery, no matter what the brand or model.

In this brand new series, Adrian talks to Guy about agricultural engine oils, tractor back end and transmissions oils, hydraulic oils, and a wide variety of maintenance ancillaries.

Together they answer the question, why the quality of your oil is so important to maintaining reliability and performance of any agricultural equipment.

The series of 5 episodes can be found on the Morris Lubricants website, social media channels and also on the Morris Lubricants dedicated youtube channel. The 5 epiosdes are:

EPISODE 1: ENGINE OIL

EPISODE 2: BACK END AND TRANSMISSION OIL

EPISODE 3: HYDRAULICS

EPISODE 4: ANCILLARIES

EPISODE 5: WHY QUALITY OIL IS IMPORTANT?

In each episode, Adrian and Guy discuss the importance of selecting the correct oil and lubricant for the different parts of the tractor and in other agricultural equipment.

They discuss what's needed in any workshop to make sure tractors, agricultural equipment and machinery continue to run smoothly. Also, find out which Morris Lubricants products Guy Martin calls the Rolls-Royce of the range and what products go into his Guy Martin's superfast mile bike.

NEW INNOVATIVE 5W-20 ENGINE OIL FOR SCANIA AND MAN IS LAUNCHED

Versimax HD18 5W-20 is a new grade of heavy-duty diesel engine oil that meets the precise requirements of the latest Scania and MAN fuel-efficient HGV engine technology.

With the first orders already despatched in just two weeks from initial enquiry, the new heavy-duty diesel engine oil complies with Scania LDF-5 and MAN M3977 specifications. This makes Morris Lubricants one of the first lubricant providers in the UK to commercialise this new 'ultra-thin' oil formulation for the haulage sector – a further demonstration of its lubricant innovation in commercial vehicle engine oils.

Readily available in 25 litre drums, 205 litre barrels and in bulk supply, Versimax HD18 5W-20 is already being used in the latest 13-litre Scania engines: DC13 173, DC13 174, DC13 175 and DC13 176. The engine oil can also be used in MAN D26 and D38 models.

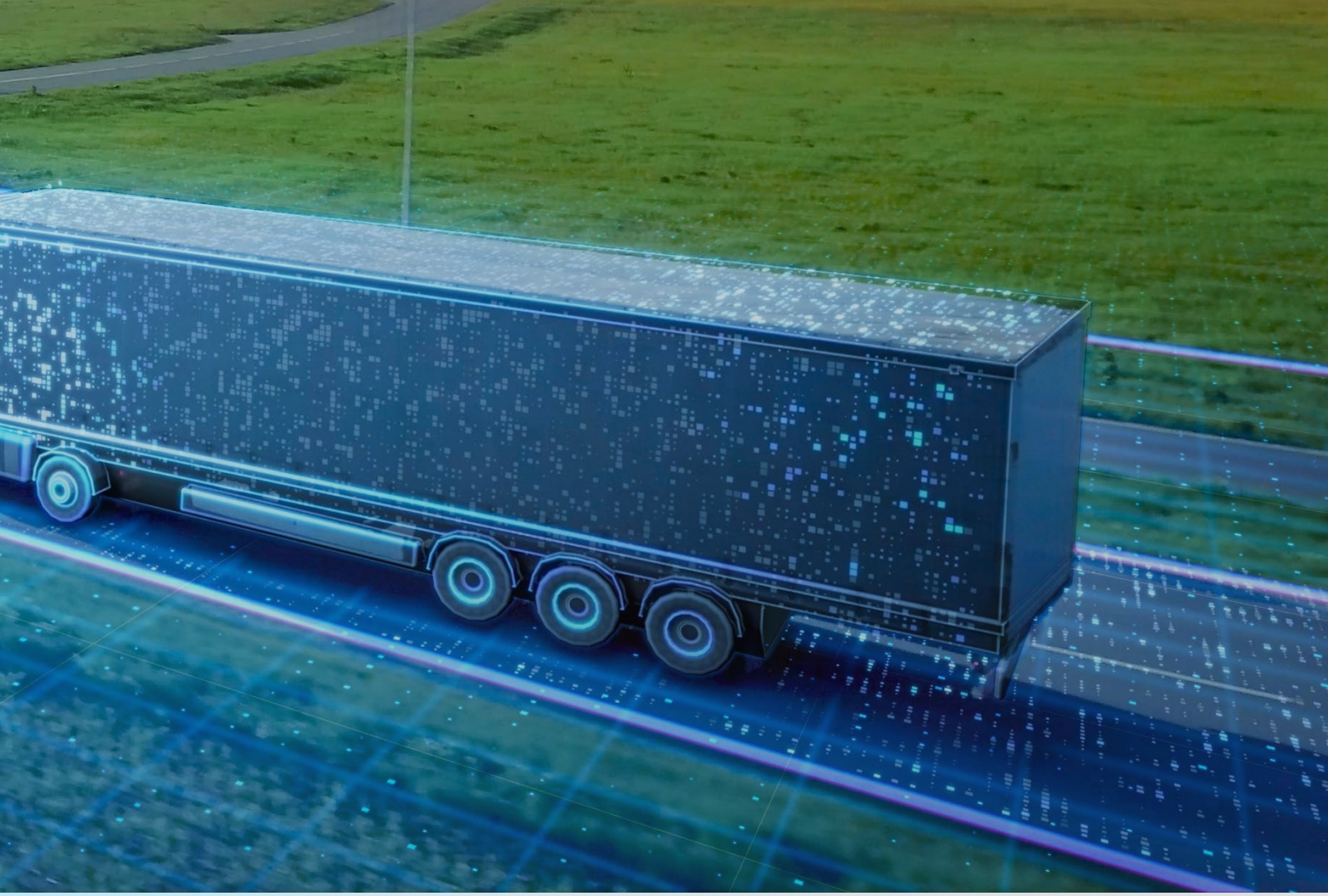
As OEMs, commercial vehicle manufacturers and upstream technology providers move closer to Euro VII compliance, which is expected to be introduced around 2025, engine technology is evolving at pace. In the HGV diesel market, significant strides have already been made in reducing diesel particulates, carbon monoxide and NOx emissions in the exhaust gas stream, and now there is increased emphasis on reducing CO_2 emissions, by improving fuel efficiency.

As a result, engine hardware is adapting, with examples including an emphasis on materials with increased strength and reduced weight, alongside a reduction in the number of cylinders required.

To deliver these improvements in fuel efficiency, engine oils have also needed to evolve. New, low viscosity formulations are emerging that reduce internal viscous drag, which in turn limits energy losses, improves overall engine efficiency and cuts CO_2 output.

Adrian Hill, Morris Lubricants' Technology Manager, explains the reasons behind the 5W-20 engine oil:

"The HGV market has witnessed significant changes in recent years, as internal combustion engines are developed for improved fuel efficiency and reduced CO_2 emissions. 5W-30 heavy-duty diesel engine formulations are a commonplace option for the major OEMs, but as these companies innovate in the direction of Euro VII compliance, we will witness another step change in oil viscosity levels.



"This is the real difference with our new Versimax HD18 5W-20 heavy-duty diesel engine oil. It has reduced oil film thickness down to passenger car engine oil levels, but for use in commercial HGVs with payloads that clearly far exceed an average road vehicle.

"Inclusive of field trials, it can take years to bring new oils and lubricants to market, particularly engine oils. Here at Morris Lubricants, we have all the necessary raw materials in our inventory, to enable us to move quickly to meet customer's demand.

"So, from identifying the initial market need, to assessing the required specification and undertaking our rigorous laboratory testing process, the Versimax HD18 5W-20 was manufactured and the first orders delivered in just two weeks."

"Scania and MAN are the first OEMs to deliver fleets here in the UK, capable of using these specifications."

THE VERSIMAX RANGE OF HEAVY DUTY DIESEL ENGINE OILS

The new Versimax HD18 5W-20 is part of the Versimax range, a series of approved, superior quality, heavy-duty diesel engine oils. These are manufactured at the Morris Lubricants facility in Shrewsbury.

The Versimax range is designed to help reduce downtime, improve fuel efficiency and contribute to the reduction in engine emissions. Used by fleet operators, maintenance technicians, mechanics, and drivers, Versimax engine oils help to rationalise usage where mixed fleets of vehicles and engine technologies are in operation.

Offering a range of oils that are suitable for previous and current generation of heavy-duty diesel engines, including those with aftertreatment devices, the Versimax range provides users with peace of mind.

VERSIMAX
SUPERIOR QUALITY DIESEL ENGINE OIL

Further information on Versimax HD18 5W-20, including the TDS and product features and benefits, can be found on morrislubricants.co.uk

The Importance of Coolants

For anyone running a vehicle with an internal combustion engine, an antifreeze coolant is essential - but its' job goes deeper than the name would suggest.

Internal combustion engines, whether petrol or diesel, generate heat and are designed to run at an optimum temperature. If this temperature is controlled effectively, the engine will perform at its most efficient. However, an engine that overheats risks catastrophic failure. Conversely, if the engine has been at rest and exposed to low temperatures (below 0°C), any water in the cooling system will freeze and cause internal damage. It's for these reasons we need an antifreeze coolant.

LOW TEMPERATURE OPERATION

The best cooling medium is water, as it readily absorbs heat. However, at 0°C water freezes, turning from a liquid into a solid. Ice is less dense than water and so as it freezes it expands. In the restricted spaces in the engine cooling system there is nowhere for the expansion to take place and so high internal pressures are generated with enough force to crack heads, cause splits in cylinder liners, burst hoses, etc.

To combat this, monoethylene glycol (MEG) is used and is added to the water. This reduces the temperature at which water freezes by disrupting the formation of ice crystals. Depending on the chosen mixture, for example 50% antifreeze coolant and 50% water, this freezing point can be driven down to -35°C. For most climates this will provide plenty of protection.

HIGH TEMPERATURE OPERATION

When the engine reaches running temperature, the area around the combustion chamber climbs rapidly and we start to exceed the boiling point of water, which is 100°C. If the water boils away, the engine will overheat and in some cases, catastrophic damage can occur. Likely issues may be head gasket failure, problems with piston and valve timing, warped or bent con-rods or even crankshaft irregularities. The coolant system is pressurised to help stop water boiling, but to give it an extra helping hand, monoethylene glycol takes on a different role and elevates the boiling point to an acceptable working level. Using our 50:50 example, as above, this will give us a value of around 108°C (depending on the system).

THE BALANCING ACT

So, if monoethylene glycol is effective at low temperatures and high temperatures, why don't we just use 100% MEG? Behind the scenes, there is a balancing act taking place. Water is the best coolant, but if you add too much MEG, its ability to carry heat away becomes impaired and the engine will overheat. However, if you don't use enough MEG, the water will freeze at low temperatures. It is therefore vitally important that we get the levels right to maximise cooling performance and freezing protection.

INHIBITORS

Another important function of an antifreeze coolant is to prevent any metallic components in the system from rusting or corroding. As we have already said, water excels at cooling, but it has a detrimental effect on metals, particularly at elevated temperatures. This is where essential chemistry is required, referred to as the inhibitor package.

The inhibitor package is a combination of different types of chemical compounds that are designed to give varying degrees of protection and may be even be used to target more sensitive metals such as aluminium in certain water pumps, for example. You may see the type of chemistry used referred to as inorganic or organic, depending on the family of compounds used and the type of protection the antifreeze coolant is designed to offer.

In general, inorganic chemistry is extremely active and will seek out all materials in the system, whether susceptible to rusting / corrosion or not. Because it is very active and doesn't discriminate, it becomes depleted after around 2 years and the antifreeze coolant solution should be changed.

Organic acid technology (OAT) only targets materials in the system that start to show signs of rusting/corrosion. This type of inhibitor system is selective and as such

does not become depleted as quickly and can be left in the cooling system for up to 5 years. Some manufacturers may require a combination of these technologies and 'hybrid' antifreezes are available for specific engine designs.

OTHER ADDITIVES

In addition to the inhibitor package, other components may be added to improve the antifreeze coolant's performance. Stabilisers are used to stop the inhibitor additives from dropping out, as well as compounds to prevent hard water deposits, pH buffering agents to maintain an optimum pH level and antifoam additives.

COLOUR

The final characteristic is colour. The language of antifreeze coolants tends to be based on their colour. But be aware, colour is not an indication of quality or performance. Monoethylene glycol itself is virtually colourless, but can be dyed a variety of colours to suit, including: blue, green, red, orange, yellow and purple. There are many others. However, it is important to remember that this is purely cosmetic and has no impact on how the antifreeze coolant performs in terms of engine protection.

SUMMARY

Antifreeze coolants perform in the engine all year round and do not just cover the winter months when the weather gets cold. The correct antifreeze coolant mixture ensures maximum operational efficiency when the engine is running, preventing damage and ensuring the integrity of the system components.

Antifreeze coolant choice should be made based on the engine manufacturer's requirements. If there is any doubt as to which antifreeze coolant is required, check with the manufacturer or seek independent technical advice.

For more information on Morris Lubricants' extensive range of antifreeze coolants, please visit morrislubricants.co.uk

HELP PREVENT RUST WHEN SALT HITS THE ROAD

Did you know that Morris Lubricants has a product perfect to keep rust at bay?

Ankor Wax is a special solvent deposited, long term corrosion preventative, having low viscosity and surface tension, thereby enabling it to spread rapidly, penetrating into all inaccessible areas and covering all surfaces however irregular. It dries to leave a continuous firm wax protective coating that imparts excellent corrosion protection properties. Ankor Wax has de-watering properties and therefore can be used where the metal parts to be treated are wet. All traces of water are displaced before the protective film is applied. Ankor Wax is effective in damp and humid climates and gives excellent protection against salt spray.

This product is ideal to apply to the underneath of vehicles or in wheel arches that do not have plastic guards. The product is regularly used in the agricultural sector to protect tools, cutting blades and other agricultural parts free from rust during the winter months. Just apply it using a brush or pump spray and let Ankor Wax do its magic!

Further details can be found on **morrislubricants.co.uk**

SOCIAL MEDIA

We are extremely social here at Morris Lubricants, we like to share all our news and keep you up to date with what's happening.

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Simply visit **whatoildoineed.com** and input the vehicle registration or select from a wide range of makes and models to identify recommended oils, lubricants and greases.

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Did you know?

Morris Lubricants supplies more than just engine oils!

morrislubricants.co.uk

Trusted by Experts

Be like Guy, use the Workshop Pro range - trusted by maintenance professionals

- MD4 Multi Purpose Maintenance Spray
- White Grease With PTFE
- Solvent Cleaner
- Solvent Degreaser
- Fully and Semi Synthetic Chain Lubricant
- Anti Seize Compound
- Carb Cleaner
- Surface Conditioner

morrislubricants.co.uk

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