MILLERS OILS

MOTORSPORT

YOUR EDGE, YOUR PERFORMANCE

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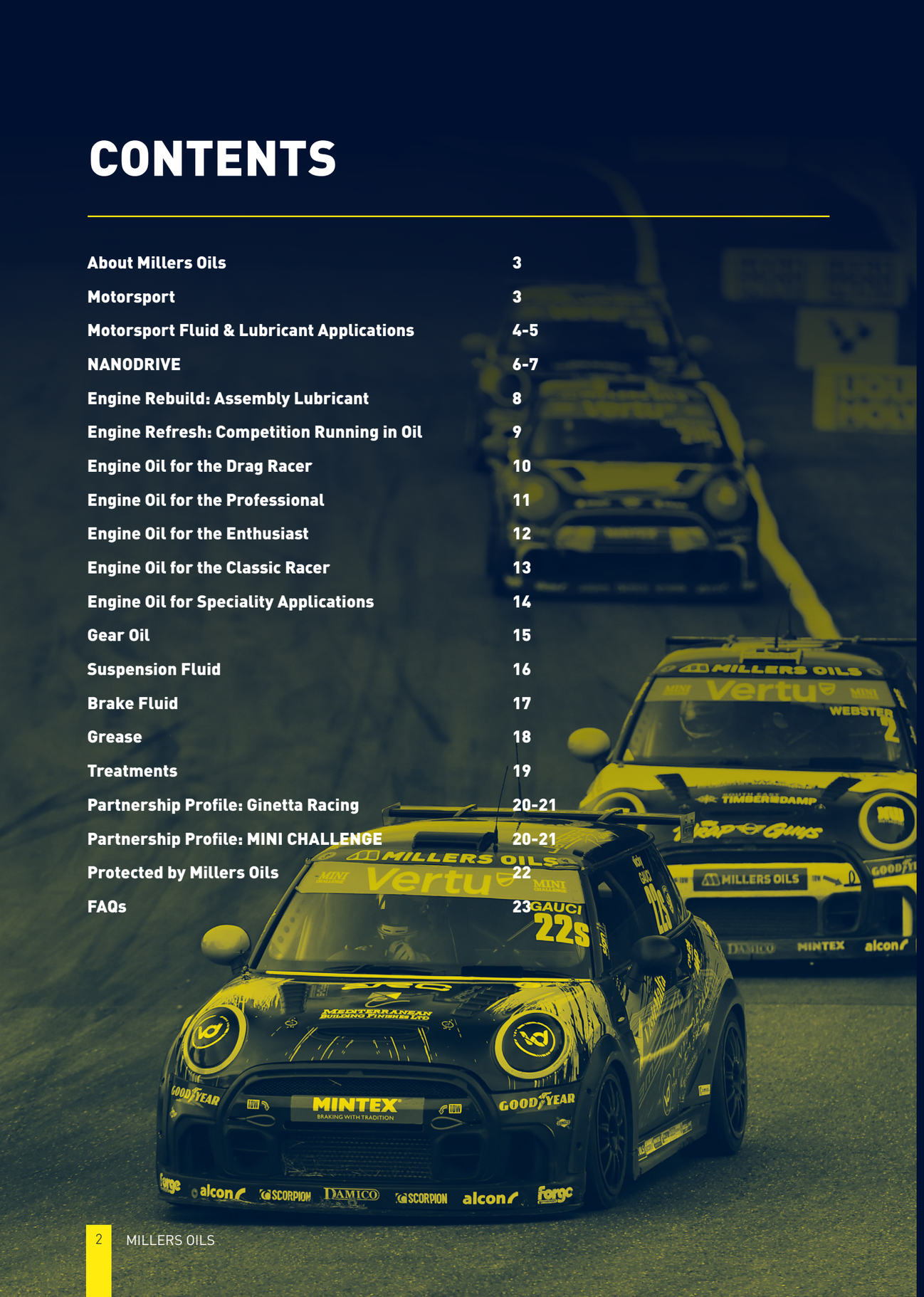


ABOUT MILLERS OILS

Millers Oils is a leading manufacturer and independent blender of oils and lubricants, operating since 1887 in Brighouse, West Yorkshire.

We pride ourselves on our award-winning innovation and our independence which allows maximum flexibility to meet our customers' needs.

MOTORSPORT

Millers Oils established a strong presence in global motorsport with the introduction of the award-winning NANODRIVE range in 2007, developed for both engine and transmission applications. Since then, the motorsport portfolio has continually evolved, supporting racers, teams, and engine builders who demand every possible competitive advantage on the track.

The Motorsport range is engineered specifically for the extreme pressures, temperatures, and loads experienced in competitive racing. From engine build and running-in through to full race operation across circuit, rally, drag, karting, and historic disciplines, each formulation is designed to maximise power, reduce friction, and maintain consistent protection when it matters most.

MOTORSPORT FLUID AND LUBRICANT APPLICATIONS

Millers Oils prides itself on supplying a comprehensive range of oils, fluids and treatments for motorsport vehicles.

ENGINE

Racing Professional Engine Oil
- CFS NT+

Available in a range of viscosities from 0W-20 - 10W-60

Racing Enthusiast Engine Oil
- CFS

Available in a range of viscosities from 5W-40 - 15W-60

Classic Race Car Engine Oil

Available in a range of viscosities from 10W-40 - 20W-60

Specialist Engine Oil
- 2-Stroke
- Castor

Drag Racing Engine Oil
- CFS X-TREME

ENGINE REBUILD/ REFRESH

Engine Components
- Assembly Lubricant

Engine Oil
- Competition Running In Oil

DRIVELINE SYSTEM

Gear Oil / Manual Transmission Fluid (MTF)
- CRX NT+

Viscosity available from 75W - 75W-140

Limited Slip Gear Oil
- CRX LS NT+

Viscosity available from 75W-90 - 75W-140

Dual Clutch Transmission (DCT)
- CRX DCT DSG NT+

SUSPENSION SYSTEM

Damper Fluid
- Suspension NT+

Available in a range of viscosities

TREATMENTS

Fuel
- CVL
- CVL Extra

Cooling System
- Extra Cool

GREASE

CV Joints
- Hi-Mol 20

Spline Shafts
- Black Moly MM2

Brake System
- Red Rubber Grease

Wheel Bearings & General Lubricant
- Deltaplex 2 EP

BRAKE SYSTEM

High Temperature Brake Fluid
- Racing Brake Fluid 320 PLUS
- Racing Brake Fluid 300 PLUS

NANODRIVE
LOW FRICTION TECHNOLOGY

NANODRIVE is Millers Oils award-winning low-friction technology, developed specifically for high-performance applications where stress on components is at its limit.

Introduced in 2007, NANODRIVE was originally engineered to meet the demands of motorsport transmissions, to deliver greater and more consistent lubrication over a wider temperature range. The technology has since evolved and is now incorporated across Millers Oils engine oils, gear oils, and suspension fluids.

HOW DOES IT WORK?

In engine and gear oils, NANODRIVE technology combines advanced surface-active nanoparticles with triple ester chemistry to significantly reduce friction, protect against wear and maximise power. In suspension fluids, the advanced nanoparticles reduce friction for a consistently smooth operation.

WHY IT MATTERS

While surfaces in engines and gearboxes may appear smooth to the naked eye, microscopic analysis reveals roughness and asperities that promote friction and wear. In harsh conditions, when the conventional oil film is compromised, these surface irregularities can lead to damaging metal to metal contact.

NANODRIVE technology addresses this in two ways:

- Nanoparticles provide a protective layer: Adsorbing to the surface of the metal components, smoothing out the surfaces and providing a physical layer that prevents direct metal to metal contact, even at high temperatures and pressures.
- Triple ester formulation enhances lubrication: The expertly balanced esters provide excellent lubricity, oxidation stability, and strong surface affinity, efficiently coating the metal surfaces to protect against friction and wear. Each ester interacts differently with themselves and other additives, but Millers Oils unique triple ester formulation works synergistically to greatly enhance performance.

WHAT IS THE EVIDENCE?

NANODRIVE has been validated through extensive laboratory and real-world testing, proving that the technology dramatically improves film strength, reduces friction and boosts power.

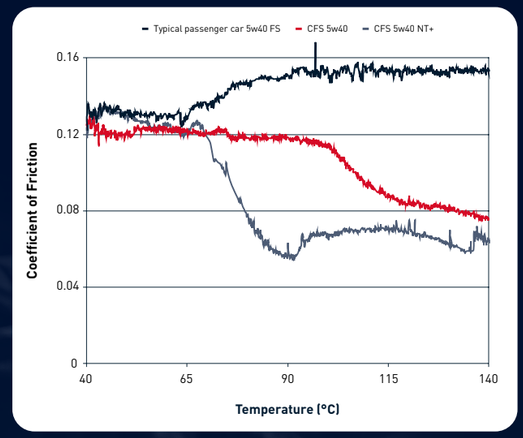
Friction Testing

Coefficient of friction = the measurement of friction between two surfaces

CFS 5W-40, CFS 5W-40 NT+ and a typical 5W-40 passenger car engine oil were tested on the HFRR at temperatures from 40°C to 140°C with a ramp rate of 1°C per minute, and a contact pressure of 833kPa kPa:

- At 100°C (typical engine operating temperature), CFS 5W-40 reduces the coefficient of friction by 27% compared to a typical 5W-40 passenger car engine oil.
- CFS 5W-40 NT+ reduces the coefficient of friction by over 53% under the same conditions.

Over 53% reduction in coefficient of friction

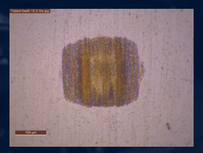


Wear Protection

Wear scar: area of material removed by metal to metal contact

HFRR wear scar analysis shows that CFS 5W-40 NT+ delivers over 48% reduction in wear scar area compared to a typical 5W-40 passenger car oil.

48% reduction in wear scar



Without NANODRIVE
Typical passenger car 5W-40:
54,100µm²

With NANODRIVE
CFS 5W-40 NT+:
28,260µm²

RECOGNISED AND RACE PROVEN

NANODRIVE has received industry recognition, winning awards including the MIA Business Excellence Award, the World Motorsport Symposium Innovation Award, and Race Tech's Most Innovative New Motorsport Product. Today, NANODRIVE technology is trusted globally across professional and grassroots motorsport disciplines, including touring cars, rally, endurance, drag racing, and cross-country competition.

ENGINE REBUILD

ASSEMBLY LUBRICANT

Formulated for use during engine rebuilds, Assembly Lubricant provides critical protection to the valve train. Its fluid formulation rather than a paste allows miscibility with oil, and the high level of ZDDP (Zinc Dithiophosphate) anti-wear additive protects from the extreme high load placed on the camshaft and cam followers on initial start-up.

The benefits:

- **Provides maximum mechanical protection of newly assembled components during initial start-up**
- **High ZDDP content offers strong anti-wear performance under high load conditions**
- **Fully miscible with engine and transmission oils for quick dispersal on start-up**
- **No need for additional oil change post-rebuild, due to seamless integration with the oil**

THE RANGE

Product	Part code
Assembly Lubricant	7982

ENGINE REFRESH

COMPETITION RUNNING IN OIL

Developed for engines fitted with new components, Competition Running-In Oil supports the bedding-in of moving parts. By allowing surface asperities to smooth progressively, it helps achieve optimal compression and combustion pressures for maximum performance. Proper running-in also reduces the risk of cylinder bore glazing, helping to minimise oil consumption and preserve engine power.

The benefits:

- **Maximises the power output by optimising the bedding in process**
- **Provides protection of highly stressed components during the critical running-in process**
- **Helps prevent cylinder bore glazing and excessive oil consumption**

THE RANGE

Product	Part code
Competition Running In Oil	7981

ENGINE OIL FOR THE DRAG RACER

CFS X-TREME is a purpose-developed engine oil engineered for the extreme combustion loads of competitive drag racing. Dyno-proven under full-load methanol and nitromethane conditions, it delivers rapid oil pressure stabilisation, consistently higher operating pressure, and exceptional film retention throughout the run cycle. From warm-up through full race simulation, performance remains stable, predictable, and reliable under the most demanding race environments. Built for methanol. Proven in nitromethane. Engineered for the drag strip.

The benefits:

- **Rapid oil pressure stabilisation for immediate protection under extreme load**
- **Higher sustained oil pressure to support increased torque demands**
- **Exceptional film strength and adhesion under severe combustion stress**
- **Proven compatibility with nitromethane and high-dilution race fuels**

THE RANGE	
Product	**Part code**
CFS X-TREME 70 NT+	8669

Official Oil Sponsor of

SantaPod RACEWAY

ENGINE OIL FOR THE PROFESSIONAL

The Competition Fully Synthetic NT+ range is engineered for professional motorsport, incorporating second-generation NANODRIVE low-friction technology to maximise power, reduce wear and deliver consistent performance under extreme race conditions.

The benefits:

- **Fully synthetic oil protects engine at both low start-up and high running temperatures**
- **Triple ester formulation works synergistically for optimised film strength and anti-wear protection**
- **Second generation NANODRIVE low-friction technology maximises power**

THE RANGE

Product	Part code
CFS 0W-20 NT+	7961
CFS 0W-30 NT+	7962
CFS 5W-40 NT+	7963
CFS 10W-50 NT+	7964
CFS 10W-60 NT+	7965

ENGINE OIL FOR THE RACING ENTHUSIAST

The Competition Fully Synthetic range is designed for club-level and enthusiast motorsport, featuring original NANODRIVE low-friction technology to increase power and torque while providing dependable protection for a competitive edge in non-professional racing.

The benefits:

- **High quality oils protect engine at both low start-up and high running temperatures**
- **Triple ester formulation works synergistically for optimised film strength and anti-wear protection**
- **Original NANODRIVE low-friction technology increases power**

THE RANGE	
Product	**Part code**
CFS 5W-40	7953
CFS 10W-40	7954
CFS 10W-50	7955
CFS 10W-60	7956
CFS 15W-60	7957

ENGINE OIL FOR THE CLASSIC RACER

Specifically developed for historic and classic race engines, this range combines modern base oil and additive technology with formulations tailored to older engine designs and fuels. Enhanced with award-winning NANODRIVE technology and triple ester chemistry, these oils reduce friction, protect against wear and help maximise performance while preserving the integrity of classic race machinery.

The benefits:

- **Today's lubrication technology to enhance yesterday's race car**
- **Triple ester formulation works synergistically for optimised film strength and anti-wear protection**
- **NANODRIVE low-friction technology increases power**

THE RANGE		
Product		**Part code**
CSS 10W-40	A high performance competition semi-synthetic engine oil. Combination of the highest quality and latest performance additives in synthetic and mineral base stocks. CSS 10w40 is a high performance semi synthetic road and race oil for car and motorcycle engines alike.	7951
CSS 20W-60	A high viscosity semi-synthetic engine oil which is specifically designed to protect competition engines running at very high temperatures. The higher viscosity also enhances performance for endurance events and is ideal for older competition engines.	7952
Classic High Performance 20W-50	This high performance oil is the world's finest SAE 20w50 fully synthetic multigrade engine oil. It has been uniquely engineered for classic performance racing, with shear stable viscosity index improvers. This product incorporates our unique nanotechnology ultra-low friction additive system. It is formulated with full ZDDP for ultimate protection.	8355
CTV Mini 20W-50	CTV Mini 20w50 is specifically formulated for competition Minis and any application where the engine and gearbox share a common oil. Very high performance semi-synthetic competition oil for engines which have their transmission in the sump such as the original Mini. Extra high performance engine oil based on the highest quality performance additives and shear stable viscosity improvers in synthetic and mineral base.	7959
COR 20W-50	COR 20W-50 is a high performance synthetic fortified competition engine oil especially developed for short oval racing engines requiring a 20W-50 viscosity. It is based on the highest quality performance additives and shear stable viscosity improvers in synthetic and mineral base oils. It is exclusively formulated for short circuit racing and particularly suited to older classic sport applications.	7958

ENGINE OIL FOR SPECIALITY APPLICATIONS

KR2T

KR2T is a high-performance, low-ash competition engine oil developed for high-revving 2-stroke engines. Proven in demanding karting applications including Rotax Max and Honda TM engines, it delivers strong lubrication and reliable protection across karts, motorcycles and other 2-stroke applications.

The benefits:

- **Improves sealing of the bores for increased power and torque**
- **Delivers maximum lubricity for reduced wear**
- **Eliminates crank case deposits, making engine rebuilds easier**
- **Dyed blue for easy confirmation that the fuel has been treated**

CB40

CB40 is a competition castor-based engine oil formulated for 4-stroke car and motorcycle engines requiring a vegetable-based lubricant. Designed for use with methanol and other alcohol-based fuels.

The benefits:

- **Outstanding wear protection from extra load-carrying additives and natural lubricity of castor oil.**
- **Enhanced anti-oxidant performance.**

THE RANGE	
Product	**Part code**
KR2T	7960
CB40	7983

DRIVELINE OIL

The competition gear oil range is fully synthetic and enhanced with second-generation NANODRIVE low-friction technology, delivering improved efficiency, reduced wear and reliable protection for transmissions operating under extreme motorsport loads.

The benefits:

- **Protects gear teeth at both low start-up and high running temperatures**
- **Triple ester formulation works synergistically for optimised film strength and anti-wear protection**
- **Includes second generation NANODRIVE low-friction technology that maximises torque and power**

THE RANGE		
Product	**Description**	**Part code**
CRX 75W NT+	Ideal for modern transmissions, differentials, and limited slip differentials (excluding plated type LSD) and where fully synthetic oil is specified, especially for high performance road and track day applications. Available in a range of viscosities for different applications.	8311
CRX 75W-80 NT+		8310
CRX 75W-90 NT+		7966
CRX 75W-140 NT+		7990
CRX LS 75W-90 NT+	Fully synthetic competition oil for transmissions and differentials, with additional friction modifiers for plate type limited slip differentials. Designed for the lubrication of competition gearboxes and axles which require limited slip high performance oils. Available in a range of viscosities for different applications.	7968
CRX LS 75W-140 NT+		7970
CRX DCT-DSG NT+	Designed to provide extreme protection in many wet and dry style dual-clutch transmissions. A fully synthetic competition dual clutch transmission oil to protect the transmission system against corrosion, oxidation, deposits, and foam.	8312

SUSPENSION FLUID

The motorsport suspension fluid range incorporates second-generation NANODRIVE low-friction technology to promote exceptionally smooth suspension movement, improved consistency and enhanced vehicle control across demanding race conditions.

The benefits:

- **Second generation NANODRIVE technology gives extremely smooth suspension operation**
- **Superior temperature stability minimises damping force variation for a consistently smooth ride**
- **High level performance across air, nitrogen and argon filled systems**

THE RANGE	
Product	**Part code**
Suspension 2.5 NT+	7971
Suspension 5 NT+	7972

BRAKE FLUID

Motorsport brake fluids are engineered to deliver consistent pedal feel and precise driver feedback under extreme temperatures. With high resistance to viscosity change and water absorption, they ensure reliable braking performance throughout demanding race use.

The benefits:

- **Maintains viscosity under extreme temperatures**
- **Robust against water absorption to ensure consistent performance**
- **Provides exceptional resistance to vapour locking**

THE RANGE		
Product	**Description**	**Part code**
Racing Brake Fluid 320 PLUS	High temperature brake fluid with dry boiling point of 320°C. Provides exceptional resistance to vapour locking and offers improved brake-feel and driver feedback.	8353
Racing Brake Fluid 300 PLUS	High temperature brake fluid with dry boiling point of 310°C. Provides exceptional resistance to vapour locking and offers improved brake-feel and driver feedback.	7976

GREASE

The grease range is formulated to lubricate critical components such as CV joints, wheel bearings and other high-load areas. Advanced additive technology provides excellent scuff resistance, minimising wear and ensuring reliable performance under extreme load, temperature and race conditions.

The benefits:

- **Excellent load-carrying capacity for extreme motorsport conditions**
- **Superior scuff and wear resistance under high stress**
- **High temperature stability for consistent performance**
- **Strong adhesion to components for long-lasting protection**

THE RANGE

Product	Description	Part code
Hi-Mol 20	Ideal for highly loaded constant velocity (CV) joints in motorsport applications. Eliminates sliding spline binding under high acceleration loads.	5264
Black Moly MM2	Suitable for Differentials/Splineshafts. Ideal for applications where a high level of anti-wear and EP performance is required, both in the industrial and automotive sectors.	5262
Deltaplex 2EP	Ideal for both anti-friction and plain wheel bearings, and highly suitable for the lubrication of universal joints.	5305
Red Rubber Grease	Ideal for the lubrication of rubber and associated components which are in contact with rubber. Used for most seals on motorsport braking systems as it is compatible with brake fluid.	5196

TREATMENTS

The motorsport treatments range is designed to complement the lubricant portfolio, supporting fuel system efficiency and overall engine performance to help deliver every marginal gain on the race track.

The benefits:

- **Enhances engine reliability under extreme conditions**
- **Improves overall performance consistency under race conditions**
- **Added protection for cooling system components**

THE RANGE

Product	Description	Part code
Fuel		
CVL 250ml	A valve seat lubricant and combustion enhancer that protects against valve seat recession. Provides flame control, allowing engines to run more advanced ignition timing, without the danger of pre-ignition or detonation. Protects against the corrosive effects of ethanol found in modern E5 and E10 unleaded petrol. Suitable for race cars fitted with knock sensors and catalytic converters.	5587
CVL Extra 500ml	A valve seat lubricant and combustion enhancer that protects against valve seat recession. Provides flame control, allowing engines to run more advanced ignition timing, without the danger of pre-ignition or detonation. Protects against the corrosive effects of ethanol found in modern E5 and E10 unleaded petrol. Suitable for race cars fitted with knock sensors and catalytic converters. Adds up to 4 octane numbers to base fuel.	5792
Water		
Extra Cool 250ml	A corrosion inhibitor and coolant enhancer concentrate. Designed to be added to coolant to help maintain flow and reduce deposit formation in radiators and reduce coolant temperature by up to 15ºC. Provides powerful corrosion protection for all metals found in engines. Suitable for use in motorsport applications where antifreeze is not allowed.	5547

PARTNERSHIP PROFILES

Millers Oils has had long-standing success with competition products, including our flagship NANODRIVE range. This expertise has led to close partnerships with leading racing series, where we work collaboratively to develop bespoke, co-branded lubricants tailored to their specific technical requirements.

Each formulation is developed using advanced R&D and validated under real-world racing conditions, ensuring consistent performance, protection, and reliability at all levels of competition.

GINETTA TECH

Ginetta Cars has a long and successful history of producing hand built race cars and has gained a reputation as one of the most renowned British heritage race car brands, and one in which some of motorsport's biggest names began their careers. Millers Oils worked in collaboration with Ginetta to develop the Ginetta Tech range of oils, used as the lubricant of choice across all Ginetta championships.

THE RANGE		
Product	**Description**	**Part code**
Ginetta Tech 0W-30	For use in the Ginetta G40 engine.	8105
Ginetta Tech 5W-30	For use in the Ginetta G56 engine.	8264
Ginetta Tech 10W-60	For use in the Ginetta G55 engine.	8106
Ginetta Tech LS 75W-90	For use in the Ginetta G55 axle.	8107
Ginetta Tech 75W-90	For use in the Ginetta G40 axle and the G40 and G55 gear box.	8108

CHALLENGER BY MILLERS OILS

The MINI CHALLENGE is one of the UK's most competitive and exciting one-make racing series, providing support to the BTCC and a proven platform for emerging talent. As the Official Lubricants Partner of the MINI CHALLENGE, Millers Oils worked in close collaboration to develop the Challenger by Millers Oils range designed to perform under the intense demands of modern MINI racing and used by every car on the grid.

THE RANGE		
Product	**Description**	**Part code**
Challenger 5W-40	MINI CHALLENGE Competition fully synthetic triple ester engine oil	8598
Challenger + 10W-40	MINI CHALLENGE Competition fully synthetic triple ester engine oil	8599
Challenger 75W-80	MINI CHALLENGE Competition fully synthetic ester transmission oil	8601
Challenger + LS 75W-140	MINI CHALLENGE Competition fully synthetic ester limited slip transmission oil	8600

COMPREHENSIVE TECHNICAL SUPPORT

At Millers Oils, we pride ourselves on delivering industry-leading technical support. Our expert team is available in-house, by phone, or via email to provide fast, reliable guidance, whether you need help choosing the right product or resolving a technical query. With Millers Oils, expert advice is always within reach.

VISION OIL ANALYSIS

PRECISION IN EVERY DROP

At Millers Oils, we know that in motorsport, performance and reliability are everything. Our Oil Sampling Kits provide invaluable insights into the condition of vehicle mechanical systems including engine, gearbox, differential etc. helping you stay one step ahead of potential issues. By regularly analysing oil, you can identify early signs of wear, contamination, or component stress before they turn into costly failures or lost track time. It's a proactive approach that supports maximum performance, consistency, and engine longevity under the most demanding conditions.

Each kit includes a simple sampling bottle and clear instructions for quick, efficient collection in the workshop or at the track. Samples are analysed by our expert team, with detailed reports highlighting vehicle health and any recommended actions, so you can make informed decisions and keep pushing the limits with confidence.

FAQS

WHAT IS VISCOSITY?

Viscosity measures an oil's thickness and how easily it flows at different temperatures. It directly influences how effectively the oil circulates and how strong the protective oil film remains under load. In motorsport applications, where engines operate under sustained stress and are often highly modified compared to standard engines, selecting the correct viscosity is vital.

The oil must flow rapidly on start-up to reach critical components, while remaining robust enough to maintain protection under extreme heat, high RPM, and heavy loads.

HOW DO MODIFICATIONS AFFECT OIL SELECTION?

Modifications to vehicles can make the original oil specification and viscosity effectively redundant. As power is increased, the internal temperatures and pressure of the engine rise, so the oil has to work harder. In general, the more stress placed on the oil, the more the required viscosity will deviate from the original vehicle specification in order to maximise film strength and protection.

HOW DOES RACE TYPE AFFECT OIL SELECTION?

Race format has a direct impact on oil viscosity and formulation choice. Certain race types, such as rallying, place the engine under high stress, increasing operating temperatures and pressures. With these race conditions it is often recommended to increase the viscosity of the engine oil to maintain film strength and protection.

Whereas, racing such as endurance, requires improved fuel economy which can be achieved by reducing the engine oil viscosity. By switching from a 5W-40 to a 5W-30 grade, fuel consumption can be reduced by up to 3%. Lower viscosities are also favoured when there is a short or no warm-up time, as the oil flows more efficiently on start-up.

MILLERS OILS

Millers Oils Head Office

Millers Oils Ltd
Brighouse, West Yorkshire
HD6 3DP, UK
T: +44 (0) 1484 713201
E: sales@millersoils.co.uk
E: international@millersoils.co.uk

www.millersoils.co.uk

Millers Oils Scotland

T: +44 (0) 1236 280107
E: glasgow@millersoils.co.uk

Technical Support

T: +44 (0) 1484 475060
E: technical@millersoils.co.uk

For H&S info or SDS, please visit our website

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MADE IN BRITAIN

MillersOilsLtd