

# PRODUCT BROCHURE

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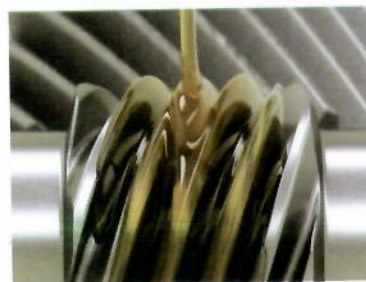
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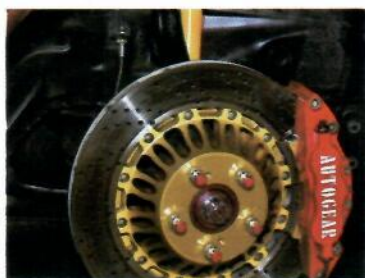
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# ENGINE OILS







## EDGE 5W-40

### Strength for Maximum Performance

Castrol EDGE is a full synthetic premium engine oil recommended by many of the worlds leading car manufacturers. Castrol EDGE is our strongest and most advanced range of engine oils.

Engineered with **fluid strength technology (TITANIUM FST)**, it is up to 40% stronger at reducing metal-to-metal contact across a range of driving speeds, lowering friction to enable maximum engine performance. It is suitable for use in automotive petrol and diesel engines where ACEA C3, API SN/CF or earlier specification.

#### Performance Benefits:

- Maximises short and long term engine performance.
- Reduces engine deposits to maximise engine response
- Independently proven to improve engine efficiency.
- Delivers and sustains maximum horsepower for longer, even when under pressure.

#### Pack Size:



1 L



4 L



5 L



208 L



210 L



## EDGE PROFESSIONAL 0W-20

### Strength for Maximum Performance

Castrol EDGE Professional, boosted with TITANIUM FST, provides outstanding oil strength for todays engines that work harder, with higher pressures than ever before. Castrol EDGE Professional E 0W-20 is approved for use in Jaguar and Land Rover vehicles that require a lubricant with the ST JLR.51.5122 specification. Castrol EDGE Professional E 0W-20 is suitable for use in automotive gasoline and diesel engines where the manufacturer recommends the ACEA A1/B1 specification.

#### Performance Benefits:

- Maximises short and long term engine performance
- Reduces engine deposits to help maximise engine response
- Delivers complete protection across a variety of engine speeds, conditions and temperatures
- Sustains maximum performance even when under pressure
- Independently proven to improve engine efficiency
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- Delivers the highest levels of fuel efficiency
- Excellent performance at low temperatures

#### Pack Size:



1 L



ITS MORE THAN JUST OIL. ITS LIQUID ENGINEERING



## MAGNATEC 5W-30

### Protection From the Start

Castrol Magnatec 5W-30 is a full synthetic engine oil with intelligent molecules that cling to the engine like a magnet providing an extra layer of protection, dramatically reducing engine wear even from the start.

#### Performance Benefits:

- Forms a powerful force field of protection
- Dramatically reduces both warm-up and stop-start wear
- Delivers unique patented protection designed specifically for modern driving  
ACEA A1/B1, A5/B5, API SN, ILSAC GF-5

#### Pack Size:



1 L



4 L



5 L



210 L



## MAGNATEC 10W-40

### Protection From the Start

Castrol Magnatec intelligent molecules cling to the engine like a magnet providing an extra layer of protection, dramatically reducing engine wear. Magnatec 10W-40 A3/B4 is suitable for use in automotive gasoline and diesel engines where the manufacturer recommends an ACEA A3/B4, API SL/CF or earlier specification 10W-40 lubricant.

#### Performance Benefits:

- Castrol Magnatecs Intelligent Molecules:
- Cling to critical engine parts when the oil drains down.
- Cling to your engine forming an extra layer that protects during start up and beyond.
- Bond to metal surfaces to make engine parts more resistant to wear.
- Are combined with synthetic technology to provide increased protection in high and low temperature applications.
- Provide continuous protection for all driving conditions, styles and temperatures

#### Pack Size:



1 L



4 L



5 L



210 L





## GTx ESSENTIAL 20W-50

### Sludge Protection For Greater Engine Reliability

Castrol GTX is one of the worlds most trusted engine oils. It protects against problems, like sludge caused by severe driving conditions such as:

- Heavy traffic
- Poor fuel quality
- Harsh weather conditions
- Exceeding oil change intervals.

It is suitable for use in automotive gasoline and diesel engines where an API SL/CF or earlier specification 20W-50 lubricant is recommended.

#### Performance Benefits:

- Advanced protection against viscosity and thermal breakdown.
- Premium quality base oils and anti-wear additives that help extend the life of your engine.
- Helps minimize oil consumption.

#### Pack Size:



1 L



4 L



205 L



## GTx ESSENTIAL 25W-50

### Sludge Protection For Greater Engine Reliability

It protects against problems like sludge caused by severe driving conditions and its an excellent solution to the problem of fuel dilution usually associated with old engines. It is suitable for use in older generation normally aspirated and turbo charged petrol and diesel engines where the manufacturer recommends an API SG/CF 25W-50 lubricant.

#### Performance Benefits:

- Reduced oil consumption.
- High level of fuel dilution capability.
- Excellent viscosity stability
- Good oil pressure control
- Provides protection against engine sludge.

#### Pack Size:



1 L



4 L



205 L



## GTX ESSENTIAL 15W-40

### Superior Diesel Engine Protection

It provides extra protection against diesel engine problems like soot and harsh deposits that your engines face everyday.

It is suitable for use in automotive diesel engines including inter-cooled and turbo charged engines where the manufacturer recommends an API CH-4/SJ or earlier specification 15W-40 lubricant.

#### Performance Benefits:

- Superior cleaning power to maintain engine performance.
- Reduces the build-up of harsh deposits.
- Helps prevent oil from thickening to keep it flowing freely.
- Outstanding diesel engine wear protection.

#### Pack Size:



1 L



4 L



205 L



## VECTON 15W-40 CJ-4

### Maximise Performance

Castrol Vecton 15W-40 CJ-4 is an advanced engine oil, formulated with TM unique System 5 Technology, for up to 40% better performance. It is designed for the latest US and European diesel engines with modern exhaust emission control systems, including DPFs. It is suitable for extended drain intervals in both on-road and off-road applications.

#### Performance Benefits:

- Promotes Fuel Efficiency.
- Ensures Low Oil Consumption.
- Longer oil drain intervals.
- Reduce wear and corrosion, enhancing the life of critical engine components.
- Fights soot, improving engine power all the way through the oil drain.
- In independent laboratory tests, it performed up to 40% better than API and ACEA industry standards limits across oil thickening, piston deposits, soot handling and wear and corrosion.
- API CJ-4.

#### Pack Size:



210 L





## VECTON 15W-40 CI-4

### For Longer Useful Oil Life

Castrol Vecton 15W-40 CI-4 is an advanced mineral heavy duty diesel engine oil that is specifically engineered to deliver longer useful oil life.

It is suitable for use in high speed 4-stroke diesel engines that use a broad range of fuel qualities. It is also compatible with diesel engines fitted with exhaust gas recirculation (EGR) system.

#### Performance Benefits:

- Promotes Fuel Efficiency
- Delivers up to 45% extra performance reserve that fights oil breakdown.
- Certified CO<sub>2</sub> neutral according to the internationally applicable PAS2060 standard.
- Ensures Low Oil Consumption.
- Longer oil drain intervals.
- Reduce wear and corrosion, enhancing the life of critical engine components.
- Fights soot, improving engine power all the way through the oil drain.

API CI-4

Pack Size:



205 L



## VECTON LONG DRAIN 10W-40 E6/E9

### Advanced Synthetic Heavy Duty Diesel Engine Oil

Castrol VECTON Long Drain 10W-40 E6/E9 is an advanced synthetic heavy duty diesel engine oil that is specifically engineered to deliver longer useful oil life.

It is suitable for highly rated diesel engines meeting Euro I to Euro VI emission requirements. It is suitable for engines with or without particulate filters, and for most EGR engines and for most engines fitted with SCR NOx reduction systems.

#### Performance Benefits:

- Extended oil drain intervals
- Certified CO<sub>2</sub> neutral according to the highest global standards
- API CJ-4

Pack Size:



208 L





## SUPER OUTBOARD PLUS

### Superior Engine Oil Performance for Outboards

Castrol Super Outboard Plus is a mineral based, superior performance engine oil designed for water-cooled 2-stroke outboard engines. It is suitable for use in premix and oil injection systems with both leaded and unleaded petrol for fuel/oil mixture ratios, as recommended by the engine manufacturer, up to 100:1.

#### Performance Benefits:

- Miscible with fuel.
- Contains selected ash-less additives to provide exceptional overall engine cleanliness and reduced spark plug fouling.

Pack Size:



1 L



## POWER 1 RACING 4T 10W-50

### Race Derived Technology

Castrol Power 1 Racing 4T 10W-50 is a fully synthetic 4-stroke engine oil for modern, high performance sports bikes that increases engine acceleration and power right up to maximum rpm. It is suitable for all makes of 4-strokes bikes, both carburettor and fuel injected where API SL (and below) and JASO MA or MA2 specifications are recommended.

#### Performance Benefits:

- Features Trizone Technology which ensures uncompromised performance protection.
- Flows fast and stays strong, reducing internal engine friction even under the most arduous conditions.
- Tested and proven to deliver exceptional acceleration at the touch of the throttle.
- Complies with requirements of catalyst equipped engines.

Pack Size:



1 L





## ACTEVO 4T 10W-40

### Continuous Protection

It is a latest generation, part-synthetic engine oil developed specifically for 4-stroke motorcycle engines. It is uniquely formulated with Active Protection Molecules (APM) and Trizone Technology which provide a continuous layer of protection, ensuring up to 70% wear reduction when compared to a JASO MA-2 motorcycle oil. Actevo 4T 10W-40 has been tested over the equivalent of 600,000km to ensure outstanding protection for motorcycles and scooters.

### Performance Benefits:

- Protects from the start to the end of every journey and at all operating temperatures.
- Produces no rust in water corrosion tests.
- Specially designed with Trizone Technology.
- API SJ.

Pack Size:



1 L



## MOTOR OIL 40

### Premium Monograde Oil

Castrol HD 40 is a premium monograde oil engineered for greater protection against thermal breakdown. This grade is recommended for use in petrol and naturally aspirated diesel engines fitted to passenger cars and commercial vehicles where SAE 40 monograde oil is specified.

### Performance Benefits:

- Satisfies engine manufacturers warranties as a monograde where API SF / CD is specified.
- Good control of sludge and deposits under adverse operating conditions.
- Excellent anti-wear and anti-corrosion additives

Pack Size:



1 L



5 L



205 L

# ENGINE OILS (MARINE)







## MHP RANGE

### Diesel Engine Lubricants

Castrol MHP 153 and 154 are high performance lubricants specifically developed for use in modern medium to highly rated marine trunk piston and power generation four-stroke engines operating on distillate fuels. It meets API CF specification and is approved by major marine engine manufacturers worldwide.

#### Performance Benefits:

- Long lasting protection in the toughest operating conditions.
- Potential to extend the time between overhauls thus reducing costs.
- Enhanced detergency to promote engine cleanliness.
- Excellent thermal and oxidative stability.
- High load carrying capabilities and high gear performance that enables them to be used as a common oil for both engine and transmission systems.
- Reduced maintenance and wear.

#### Pack Size:



205 L



BULK

Name	Method	Units	MHP 153	MHP 154
SAE Number			30	40
Kinematic Viscosity @1000C	ASTM D445	mm2ls	11.5	13.5
Total Base Number, TBN	ASTM D2896	mg KOH/g	15	15
Density @ 15°C, Relative	ASTM D4052	g/ml	0.890	0.895
Flash Point (PMC)	ASTM D93	°C	>200	>200
Pour Point	ASTM D97	°C	-12	-12
FZG Gear Test, A8, 3/90	DIN 51 354	FLS	12	12



## CYLTECH 70

### Crosshead Engine Oil

Castrol Cyltech 70 is a marine diesel engine cylinder lubricant developed to provide good performance at high temperatures and pressures found in low speed crosshead engines burning residual fuels.

It can be used with a wide range of fuels with sulphur content typically between 0.1% and 3.5%.

#### Performance Benefits:

- Excellent performance, even at optimised lubricant feed rates.
- Excellent control of piston ring and cylinder liner wear.
- High level of piston, piston ring and cylinder liner cleanliness.
- Good thermal and oxidative stability.

**Pack Size:**



205 L



## CYLTECH 50S

### Crosshead Engine Cylinder Oil

Cyltech 50S is a 50BN marine diesel engine cylinder lubricant for two-stroke crosshead engines based on the well proven Cyltech technology. Suitable for:

- Engines using low to moderate sulphur fuels (heavy fuel < 2.5% S).
- Engines operating on residual fuel with up to 3% sulphur for ship owners who, at their own discretion, wish to use a single cylinder oil when switching between low and medium sulphur fuels.
- In-service running-in (distillate or heavy fuel), sea trials and test bed trials.

#### Performance Benefits:

- Excellent control of piston ring and cylinder liner wear. Superior detergency performance for engine cleanliness
- Ensures reduced deposits, especially calcium carbonate.
- Higher safety margin against scuffing under prolonged operation on low-sulphur fuel.

**Pack Size:**



205 L





## CYLTECH ACT

### Crosshead Engine Cylinder Lubricant

Castrol Cyltech ACT (Ash Control Technology) is a premium marine diesel engine cylinder lubricant specifically developed to provide protection when using low sulphur fuels and LNG. It provides optimum protection against potential ash deposits that may be formed as a consequence of using low sulphur fuels with traditional lubricants of a high ash (or high base number (BN)). Suitable for:

- Cylinder lubrication of all crosshead engines burning low sulphur fuels that comply with current IMO Emission Control Area (ECA) legislation where a maximum sulphur content of 0.1% (1,000 ppm) is mandated.
- Low sulphur and zero sulphur fuels such as natural gas.

#### Performance Benefits:

- Reduced potential for ash deposition on engine components.
- Reduced risk of cylinder bore polishing as a consequence of ash deposits rubbing on the liner.
- Maintains a clean piston ring zone, keeping rings free to move in the grooves.

Pack Size:



208 L



## RLX SUPER 40

### Monograde Diesel Engine Lubricant

RLX Super 40 is a 5th Generation (LMOA), zinc and chlorine free engine crankcase lubricant specifically designed for the lubrication of

- Diesel propulsion
- Diesel electric
- Stationary power generation installations

#### Performance Benefits:

- Optimum balance of detergency and dispersancy resulting in cleaner engines.
- Extended oil drain intervals reduces engine downtime.
- Excellent protection against wear and acid corrosion.
- Controlled oil consumption and maintains excellent oil film between bearings at high operating temperatures.
- Meets the oil recommendations for Caterpillar 3600 series engines. Suitable for all ALCO engines.
- Exceeds detergency requirements of API CF and CF-2.

Pack Size:



208 L





## **TECTON DD MONOGRADE 40**

### **Diesel Engine Lubricant**

Tecton DD Monograde 40 is a special low ash formulation developed to provide complete protection for trunk piston diesel engine.

It meets the latest performance requirements for Detroit Diesel 2-stroke engines, operating with diesel fuels up to 0.5% maximum sulphur. It meets API CF/CF-2 requirements.

#### **Performance Benefits:**

- Protection against deposit formation ensuring efficient engine operation and longer engine life.
- Protection against wear with its advanced anti-wear additives.
- Suitable for Detroit Diesel Series 149 engines.

#### **Pack Size:**



208 L



## **CDX 30**

### **Crosshead Engine System Oil**

Castrol CDX 30 is a premium alkaline system lubricant suitable for use in the crankcase of low-speed, highly rated marine crosshead type diesel engines, including the latest generation of camless or electronic engines.

#### **Performance Benefits:**

- Good demulsibility, water tolerance and separation with regard to seawater and fresh water ingress.
- Good thermal stability and oxidation resistance which are of particular importance with oil cooled pistons.
- High level of corrosion resistance against contamination from fresh water and sea water.
- Excellent load carrying properties.
- Detergents to maintain piston and crankcase cleanliness.
- Excellent hydraulic oil properties when used in the operating systems of the latest camless or electronic engines.

#### **Pack Size:**



205 L





## TLX PLUS

### Diesel Engine Lubricants

Castrol TLX Plus is a range of high performance lubricants formulated to overcome the adverse conditions seen in engines with low oil consumption and operating with varying heavy fuel qualities.

It has been developed for use in highly-rated medium speed diesel engines for marine propulsion and power generation applications.

#### Performance Benefits:

- Good wear performance.
- Good thermal & anti-oxidation stability.
- Good protection against corrosion in the presence of sea water.
- High load carrying properties of FZG 12 for anti-wear performance.
- Excellent anti-foam properties.
- Tolerant to water contamination.
- Meets API CF specification.

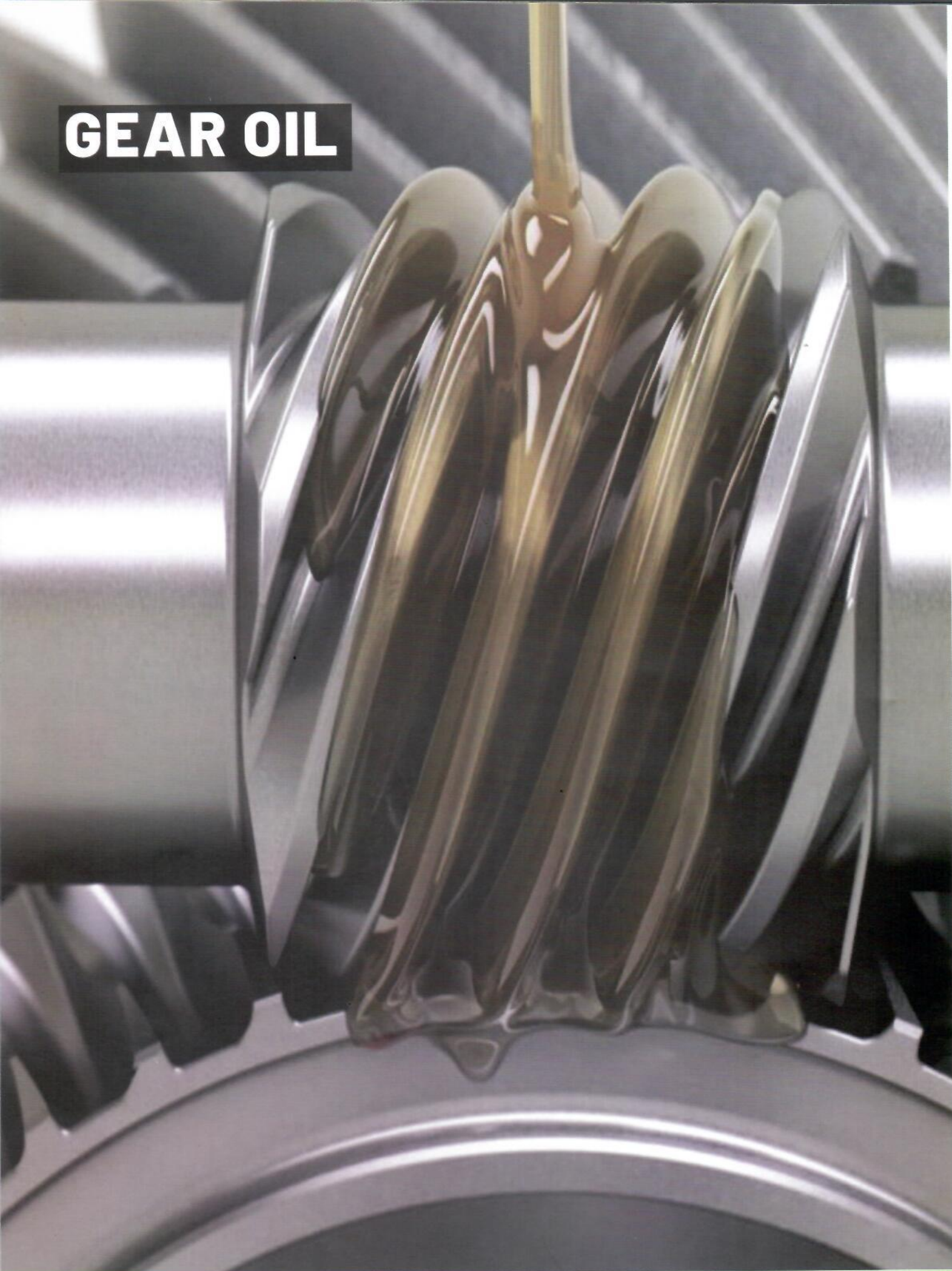
#### Pack Size:



205 L

Name	Units	TLX Plus 203	TLX Plus 204	TLX Plus 303	TLX Plus 304	TLX Plus 404	TLX Plus 504
SAE Number		30	40	30	40	40	40
Viscosity, Kinematic 100°C	mm <sup>2</sup> /s	11.5	14	11.5	14	14	14
Total Base Number, TBN	mg KOH/g	20	20	30	30	40	50
Density @ 15°C, Relative	g/ml	0.897	0.900	0.902	0.906	0.913	0.919
Flash Point, PMCC	°C	>200	>200	>200	>200	>200	>200
Pour Point	°C	-6	-6	-6	-6	-6	-6
Fzg Gear Test A/ 8.8/90	FLS	12	12	12	11	12	12

# GEAR OIL







## CASTROL ALPHA SP RANGE

### Gear Oil

The Castrol Alpha SP gear oil range of high quality lubricants are based upon highly refined mineral oil, enhanced with an extreme pressure additive technology providing good thermal stability, high load carrying capacity and microscopic wear protection. It is recommended for the lubrication of:

- Industrial gear boxes using forced circulation or splash and oil bath lubrication.
- Spur, helical gears and lightly loaded worm type gear applications.

### Performance Benefits:

- Extreme Pressure (EP) performance protect gears against wear and shock-loading.
- Good water separation and demulsification properties.
- High protection against corrosion and wear.
- Compatible with most types of seal materials.

### Pack Size:



20 L



205 L



210 L

Name	Units	SP 46	SP 68	SP 100	SP 150	SP 220	SP 320	SP 460	SP 680	SP 1000
AGMA No.	-	-	2EP	3EP	4EP	5EP	5EP	7EP	8EP	
ISO Viscosity Grade	-	46	68	100	150	220	320	460	680	1000
Density @15°C / 59°F	kg/m <sup>3</sup>	880	880	890	890	890	900	900	920	930
Kinematic Viscosity @40°C / 104°F		46	68	100	150	220	320	460	680	1000
Kinematic Viscosity @100°C / 212°F	mm <sup>2</sup> /S	6.8	8.8	11.2	14.5	18.7	24.0	30.5	37.3	43.6
Viscosity Index	-	>95	>95	>95	>95	>95	>95	>95	89	80



## ALPHASYN EP RANGE

### Synthetic Heavy Duty (PAO) EP Gear Oils

It is a range of high quality synthetic lubricants based on Polyalphaolefin (PAO) fluids and Extreme Pressure (EP) additive technology.

Suitable for:

- All types of enclosed gears including heavy and shock loaded gears and bearings where extreme pressure properties are required.
- Draw works transmissions and top drives on Mobile Offshore Drilling Units and Onshore sites.

### Performance Benefits:

- High Viscosity Index makes the product suitable for a wide temperature range.
- Rapid air release and good performance in the Flender Foam Test prevents foaming.
- PAO based lubricant provides good compatibility with seals, paints and mineral oil based lubricants.
- Excellent thermal stability and oxidation resistance.
- Maximum protection against wears and shock loading.

Pack Size:



20 L



210 L

Name	Units	Alphasyn EP 150	Alphasyn EP 220	Alphasyn EP 320	Alphasyn EP 460	Alphasyn EP 680
Density @ 15°C/ 59°F	kg/m <sup>3</sup>	860	860	860	860	870
Kinematic Viscosity @ 40°C / 104°F	mm <sup>2</sup> /S	151	223	326	455	671
Kinematic Viscosity @ 100°C / 212°F	mm <sup>2</sup> /S	19.8	26.4	35.5	46.5	63.4
Viscosity Index	-	150	152	155	159	165



## ALPHASYN HG RANGE

### Synthetic Gear Lubricants

Alphasyn HG synthetic fluids are polyalphaolefin based, high performance lubricants formulated with specially selected additives to offer a range of fluids for use in both gear and bearing applications.

It is suitable for applications at high operating temperatures and loadings, Alphasyn HG provides superior performance benefits including excellent thermal and oxidation stability and enhanced load carrying ability as detailed below. Ranges include HG 100, 150, 220 and 320.

#### Performance Benefits:

- Substantially extended lubricant life.
- Excellent anti-wear, extreme pressure and load carrying properties
- Superior performance across a wide temperature range and in particular at high temperatures.
- Excellent thermal and oxidative stability.
- Low pour point and good air and water separation capabilities.

Pack Size:



20 L



## ALPHASYN PG RANGE

### Synthetic industrial EP gear oil

The Castrol Alphasyn PG gear oil range of synthetic lubricants are based on poly alkylene glycol (PAG) fluids enhanced with antioxidants, rust inhibitors and Extreme Pressure (EP) additives of high thermal stability.

It is suitable for use in worm reduction gear boxes, where the low coefficient of friction of the PAG base fluid improves efficiency.

Ranges include PG 150, 220, 320 and 460.

#### Performance Benefits:

- Low coefficient of friction reduces energy consumption and lowers operating temperatures
- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products
- Inherently high VI makes the product suitable for operations operating over a wide temperature range
- High load carrying capacity and good wear protection reduces maintenance.

Pack Size:



20 L



208 L





## ALPHASYN T RANGE

### Synthetic gear & hydraulic lubricant

The Castrol Alphasyn T gear oil range of synthetic lubricants are based on polyalphaolefin (PAO) fluids and sulphur/ phosphorus antiwear additive technology to provide outstanding thermal stability and good load carrying capacity. Suitable for:

- Most types of light to medium duty enclosed gear systems but should not be used for heavy / shock loaded systems.
- Bearings and circulatory systems operating at high temperatures.
- High temperature applications such as in hydraulic systems and for the lubrication of large, slow moving gears.

Ranges include 32, 46, 68, 100.

#### Performance Benefits:

- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.
- Inherently high viscosity index makes the product suitable for operations operating over a wide temperature range.
- Good antiwear and load carrying abilities minimises gear wear and prolongs gear tooth life.
- Good water separation and demulsification characteristics promote reduced down time through prolonged lubricant life and increased equipment reliability.
- PAO base fluid provides good compatibility with seals, paints and mineral oil based lubricants.

Pack Size:



20 L



## AXLE EPX 80W-90

### API GL-5 Multigrade

Axle EPX 80W-90 is a Multigrade gear oil fortified to meet the requirements of API GL-5. Its primary use is for hypoid gears featured in automotive differentials but is often specified in highly loaded spiral bevel or planetary gearboxes on offshore installations and onshore drilling sites.

#### Performance Benefits:

- Good thermal/oxidation stability eliminating deposit formation that thickens oil.
- Superior low temperature fluidity providing smoother operation in cold start conditions.

Pack Size:



5 L



20 L



205 L



210 L





## AXLE EPX 85W-140

### Axle Fluid for Specific OEMs

Axle EPX 85W-140 is a multipurpose axle oil which may be used in differentials, final drives and other applications in passenger cars and commercial vehicles where API GL-5 performance is required.

It is approved by MAN and ZF for use in a range of commercial applications including axles in off-road and agricultural equipment.

#### Performance Benefits:

- High load carrying capability ensures gears operating under high loads are protected prolonging component life.
- High film strength ensures protection against wear and shock loads.
- Good thermal/oxidation stability protects against the formation of deposits and oil thickening prolonging the life of components and lubricant.

#### Pack Size:



5 L



205 L



210 L



## AXLE Z LIMITED SLIP 90

### Axle Fluid for limited slip differentials

Axle Z Limited Slip 90 is a mineral oil based gear oil which is suitable for use in limited slip differentials in cars and commercial vehicles where API GL-5 oils with specific limited slip friction performance is required. It can also be used in conventional differentials.

It is approved by ZF for use in their multi-disc wet brakes and self-locking differentials used in a range of commercial vehicle applications including axles in off-road and agricultural equipment.

#### Performance Benefits:

- Optimised and stable friction characteristics for effective operation of limited slip differentials throughout the drain interval.
- Very good wear protection, even under severe conditions, prolongs component life.
- Specifically formulated to meet friction requirements of ZF wet brakes and locking differentials.

#### Pack Size:



210 L





# TRANSMISSION FLUID



ETERNA BROCHURE FOR CASTROL





## ATF DEX II MULTIVEHICLE

### Automatic Transmission and Power Steering Fluid

Automatic Transmission Fluid which may be used in automatic transmissions and power steering units of many types of vehicle where Dexron® IID or Mercon® performance is required.

It is also approved for use in many European heavy duty automatic transmissions and Mercedes Benz manual transmissions.

#### Performance Benefits:

- Multiple approvals provide wide ranging use.
- Ensures efficient operation of power steering units under all conditions.
- High thermal stability protects against deposits and oil thickening prolonging the life of components and lubricant.
- Enhanced friction characteristics and wear protection maintain effective operation of equipment.
- Effective seal compatibility reduces the risk of leakages.

#### Pack Size:



1 L



208 L



## TRANSMAX DEX III MULTIVEHICLE

### Automatic Transmission Fluid

Transmax Dex III Multivehicle, formulated with Smooth Drive Technology is designed for use in

- GM automatic transmissions pre 2005 and Ford automatic transmissions build between 1983 and 1996 where Dexron(II or III) or Mercon are required.
- Power steering units.

It has a wide range of European heavy duty automatic transmissions approvals as well as Allison heavy duty transmissions against TES 389.

#### Performance Benefits:

- Multiple OEM approvals make it suitable for wide ranging use.
- Enhanced friction durability for smooth transmission performance.
- Enhanced wear and deposits protection to provide longer component life.
- Excellent thermal and oxidative
- High viscosity index provides a stable viscosity over a wide temperature range.

#### Pack Size:



1 L



208 L



## TRANSYND

### Fully Synthetic Automatic Transmission Fluid

TranSynd is a premium, synthetic universal power-shift and automatic transmission fluid with TES 295 and TES 468 approval.

It can be recommended for all vehicles calling for Dexron III / Mercon ATFs suitable for bus and refuse vehicles with automatic transmissions.

#### Performance Benefits:

- Excellent thermal and oxidative stability Excellent transmission cleanliness under all conditions permits extended oil drain and decreased servicing.
- Excellent temperature reduction through reduced friction leads to longer oil and component life.
- Lower power input means fuel savings potential and reduced emissions.
- Outstanding cold flow properties enables faster oil flow to all critical components.
- Free from chlorine and heavy metals for better environmental compatibility.

#### Pack Size:



208 L



## SYNTRANS Z LONG LIFE 75W-80

### Manual Transmission Fluid

Castrol Syntrans Z Long Life 75W-80 is a full synthetic SAE 75W-80 approved for use in all ZF commercial manual and automated manual transmissions.

It is particularly suitable for severe applications where loads and temperatures are higher.

#### Performance Benefits:

- Excellent frictional characteristics with carbon, sinter bronze and molybdenum synchronisers.
- Promotes Temperature reduction during operation.
- Provides excellent low temperature fluidity giving improved protection and smooth gear shifts at low temperatures.
- Excellent thermal and oxidative stability extends the life of transmission and lubricant extending drain intervals and reducing service needs.
- Excellent wear and EP performance provides protection to components under high loads.

#### Pack Size:



208 L





## MANUAL GL-4 80W90

### Manual Transmission Fluid

Castrol Manual GL-4 80W-90 is a mineral based manual transmission fluid that may be used in applications where a GL-4 is required.

#### Performance Benefits:

- Good thermal stability protects against deposit formation and oil thickening.
- Good anti-wear and load carrying characteristics extend the life of components.
- Improved low temperature protection and gear shifts compared to monograde products.

#### Pack Size:



5 L



210 L



## TRANSMAX OFF ROAD RANGE

### Powershift Transmission Fluid

Castrol Transmax Offroad is a transmission lubricant using highly refined mineral oil, designed for use in powershift transmissions, direct drive transmissions, wet disc brakes, final drives and differentials in off road machinery where Caterpillar TO-4 is required.

#### Performance Benefits:

- Good oxidation stability maintains high temperature performance and transmission cleanliness during service life.
- Stable friction characteristics eliminate slippage and reduce brake noise.
- Excellent friction performance with a wide range of friction materials ensures smooth positive changes and enhanced friction material durability.
- Improved wear performance extends component life

#### Pack Size:



210 L

Name	Units	AWH-M 15	AWH-M 32	AWH-M 46	AWH-M 68	AWH-M 100
ISO Viscosity Grade	-	15	32	46	68	100
Density @ 20°C	kg/m <sup>3</sup>	0.876	0.867	0.875	0.878	0.881
Kinematic Viscosity @ 40°C	mm <sup>2</sup> /S	15	32	46	68	100
Kinematic Viscosity @ 100°C	mm <sup>2</sup> /S	3.8	6.3	8.10	10.80	13.20
Viscosity Index	-	150	150	150	140	140
Pour Point	°C	-48	-39	-36	-36	-33
Flash Point (COC)	°C	160	200	220	220	220



# HYDRAULIC OIL







## HYSPIN AWS RANGE

### Anti-wear Hydraulic Oil

It is based upon highly refined mineral oil enhanced with a stabilised zinc additive system.

It is suitable for industrial hydraulic systems which require antiwear protection such as lightly loaded gears, variable speed units and bearings.

#### Performance Features:

Hyspin AWS has the following advantages when compared to conventional hydraulic oils:

- Good thermal and oxidative stability.
- Excellent anti-wear performance increases wear protection.
- Good filterability characteristics, including in the presence of water.
- Excellent water separation and hydrolytic stability.

#### Pack Size:



20 L



205 L



210 L

Name	Units	Aircol PD 32	Aircol PD 46	Aircol PD 68	Aircol PD 100	Aircol PD 150
ISO Grade		32	46	68	100	150
Density @ 15°C, Relative	g/ml	0.87	0.87	0.88	0.89	0.89
Viscosity, Kinematic 40°C	cSt	32	46	68	100	150
Viscosity, Kinematic 100°C	cSt	5.57	6.67	8.57	11.4	14.5 32
Viscosity Index		110	100	100	98	98
Flash Point, PMCC	°C	>200	>200	>200	>200	>200 -21
Pour Point	°C	-21	-21	-21	-21	-9





## HYSPIN HLP-D 68

### Detergent Hydraulic Oil

The Hyspin HLP-D 68 hydraulic oil lubricant is based upon highly refined mineral oil enhanced with a zinc additive system. It also contains detergent and dispersant additives.

It is primarily in machine tool hydraulic systems, gears and clutch drives in mobile hydraulic systems used outdoors.

#### Performance Benefits:

- Smooth functioning of sliding parts in hydraulic systems and machine tools.
- Good surface wetting properties provide smooth sliding of seals on hydraulic pistons and rods and reduces corrosion.
- Excellent corrosion protection in arduous conditions.
- Maintains performance in wet operating conditions. Eg: outdoor equipment, machining operations.

#### Pack Size:



210 L



## HYSPIN AWH-M RANGE

### High Viscosity Index Anti-wear Hydraulic Oils

The Castrol Hyspin AWH-M hydraulic oil range of shear stable high viscosity index lubricants are based on the latest stabilised zinc additive technology.

Applications include:

- Outdoor equipment which are likely to operate in wide temperature ranges, such as machinery subjected to cold start up conditions and high temperature continuous running.
- Indoor manufacturing equipment that incorporates control systems requiring minimal viscosity change with temperature.
- The Hyspin AWH-M range is fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

#### Performance Benefits:

- It exhibits excellent corrosion and wear protection
- Outstanding thermal and oxidative stability
- Excellent hydrolytic stability and separates rapidly from water contamination upon standing.

#### Pack Size:



20 L



208 L



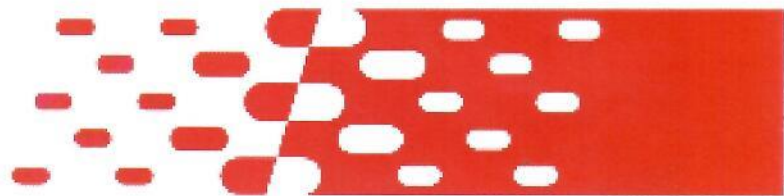
210 L



Name	Units	AWH-M 15	AWH-M32	AWH-M46	AWH-M 68	AWH-M 100
ISO Viscosity Grade	-	15	32	46	68	100
Density @ 20°C	kg/m³	0.876	0.867	0.875	0.878	0.881
Kinematic Viscosity @ 40°C	mm²/S	15	32	46	68	100
Kinematic Viscosity @ 100°C	mm²/S	3.8	6.3	8.10	10.80	13.20
Viscosity Index	-	150	150	150	140	140
Pour Point	°C	-48	-39	-36	-36	-33
Flash Point (COC)	°C	160	200	220	220	220



# COMPRESSOR OIL





## AIRCOL PD RANGE

### Air Compressor Lubricants

Its a range of compressor oils are based upon highly refined mineral oils and carefully chosen additives. They are intended for the lubrication of rotary and reciprocating air compressors.

#### Performance Benefits:

- Good viscosity characteristics over a wide range.
- Excellent water separation characteristics.
- Prevents corrosion when operating under humid conditions.
- Excellent coalescing properties means little carry over of oil in the air stream.
- Low deposit forming tendencies extends oil change intervals and provides longer air filter life which contributes to a reduction in maintenance costs.
- Good thermal stability, low volatility and low carbon formation reduces the risk of fire and explosion.

#### Pack Size:



20 L



208 L

Name	Units	Aircol PD 32	Aircol PD 46	Aircol PD 68	Aircol PD 100	Aircol PD 150
ISO Grade		32	46	68	100	150
Density @ 15°C, Relative	g/ml	0.87	0.87	0.88	0.89	0.89
Viscosity, Kinematic 40°C	cSt	32	46	68	100	150
Viscosity, Kinematic 100°C	cSt	5.57	6.67	8.57	11.4	14.5
Viscosity Index		110	100	100	98	98
Flash Point, PMCC	°C	>200	>200	>200	>200	>200
Pour Point	°C	-21	-21	-21	-21	-9





## AIRCOL SN RANGE

### Synthetic Reciprocating Air Compressor Lubricant

Castrol Aircol SN air compressor lubricants are diesterbased synthetic lubricants with excellent oxidation resistance and low carbon-forming tendency.

Whilst Aircol SN 68 was primarily intended for the crankcase and cylinders in reciprocating air compressors, it may also be used in certain types of turbochargers.

#### Performance Benefits:

- Superior oxidation stability.
- Improved lubricity and film strength.
- Higher film strength and excellent anti-wear properties.
- Excellent high temperature performance.
- The operating range of AircolSN grades extends well beyond that of conventional mineral oils.

Pack Size:



20 L

Name	Units	Aircol SN 68	Aircol SN 100
ISO Viscosity Grade	-	68	100
Relative Density at 15°C	g/ml	0.96	0.96
Kinematic Viscosity at 40 °C	mm <sup>2</sup> /S	68	100
Kinematic Viscosity at 100 °C	mm <sup>2</sup> /S	7.6	10.3
Viscosity Index	-	67	89
Flash Point, COC	°C	>200	>200
Pour Point	°C	-40	-40



## AIRCOL SR RANGE

### Synthetic Rotary Compressor Lubricant

Aircol SR Range are designed for use in rotary screw compressors and are based on polyalphaolefin (PAO) fluids. It is suitable for use in oil flooded rotary screw compressors usually met in marine applications.

#### Performance Benefits:

- Increased oil service life
- Very low deposit forming tendency, extends service life of filters and separators.
- Outstanding oxidation stability and anti-wear performance providing long lubricant and equipment life.
- Ester-free formulation eliminates the formation of corrosive acids leading to longer equipment life.
- Excellent water separation characteristics allow condensation to readily separate from the oil.

Pack Size:



20 L

Name	Units	Aircol SR 32	Aircol SR 46
Density at 15°C	g/ml	0.83	0.84
Kinematic Viscosity at 40°C	mm <sup>2</sup> /s	32	46
Kinematic Viscosity at 100°C	mm <sup>2</sup> /s	6.1	7.8
Viscosity Index	-	137	137
Foam Sequence I	mls/mls	10/0	10/0
Pour Point	°C	-54	-54
Flash Point, COC	°C	264	264





## AIRCOL SW RANGE

### Synthetic Refrigeration Compressor Lubricant

The Castrol Aircol SW range of synthetic refrigeration lubricants are formulated from polyolesterbase stocks. They are specifically designed for use with refrigeration systems using environmentally friendly HFC refrigerants, in particular R134a.

#### Performance Benefits:

- The synthetic base stocks used in the Aircol SW range are fully miscible with HFCs.
- Enhanced hydrolytic stability and load carrying and inhibition against copper-plating.
- Wax free and hence have very low pour points.

#### Pack Size:



5 L



20 L

Name	Units	SW 32	SW 46	SW 68	SW 100	SW 170	SW 220
Density 20°C/68°F	kg/m <sup>3</sup>	977	980	980	969	968	975
Base Oil Viscosity@ 40°C/ 104°F	mm <sup>2</sup> /s	32	46	68	100	170	220
Base Oil Viscosity@ 100°C/212°F	mm <sup>2</sup> /s	5.4	6.5	8.5	11.5	17	19
Pour Point	°C/°F	-46/-50.8	-42/-43.6	-39/-38.2	-30/-22	-27/-16.6	-27/-16.6



# BRAKE FLUID







## BRAKE FLUID DOT 4

### Synthetic Poly-Alkene Glycols and Borated Ester

Castrol Brake Fluid DOT 4 is a synthetic brake fluid comprising of glycols and borated esters to achieve a higher boiling point and wet boiling point. It is designed for use in all brake systems particularly those which are exposed to extreme conditions.

#### Performance Benefits:

- High boiling point temperature to reduce vapour lock.
- Exceeds the requirements of the SAE J1703, SAE J1704, FMVSS 116 DOT 4, ISO 4925 and JIS K 2233 specifications.
- Castrol Brake Fluid DOT 4 is fully compatible with other fluids meeting FMVSS 116 DOT 3 and DOT 4.

#### Pack Size:



0.2 L



0.5 L



210 L

# COOLANT







## RADICOL NF

### Antifreeze Coolant

Castrol Radicool NF is an antifreeze concentrate formulated using monoethyleneglycol and selected additives, free from nitrite, amine and phosphate inhibitors.

It uses hybrid technology for the modern performance engines of cars and trucks.

#### Performance Benefits:

- Excellent low temperature protection.
- Provides excellent protection against corrosion.
- Efficient lubrication of water pumps.
- Protects for up to 3 years.
- Compatible with conventional seal and hose materials used in engine cooling systems.
- Contains bittering agent.
- Has many OEM approvals

#### Pack Size:



210 L



## RADICOL SF PREMIX

### Antifreeze Coolant

Castrol Radicool SF Premix is a long-life ready to use 50:50 pre-mixed coolant based on monoethyleneglycol with advanced organic acid inhibitor technology. It is suitable for use in

- Engines employing cast iron, aluminium, copper or combinations of these metals used in modern engine designs.
- Standard rubber hoses, gaskets and seals used within the cooling system.

#### Performance Benefits:

- Longer operational life by allowing extended drain intervals of 3 years plus.
- Excellent protection against cavitation corrosion, cooling system blockage, overheating and freezing.
- Prevents build up of calcium deposits from use of hard water, thereby reducing possibility of radiator blocking and restricted flow of coolant.

#### Pack Size:



1 L



5 L



210 L





# CHEMICALS





## TRANSAQUA™ HC RANGE

### Water-Based Subsea Production Control Fluid

Castrol Transaqua HC 10 and HC 20 are water-based hydraulic control fluids specifically formulated for use as the control medium in subsea production control systems and in high and ultra high pressure gas wells, where there is a risk of hydrate formation due to gas ingress.

#### Performance Benefits:

- Allow operation in extremely low ambient temperature environments and specifically inhibit hydrate formation in high and ultra high pressure control lines.
- Maintains corrosion performance with seawater contamination.
- Tolerant of the high well temperatures encountered by those parts of the control system located at the well bore.
- Fully compatible and miscible in all proportions with other products in the Castrol Transaqua range and most other water-based subsea control fluids.

Pack Size:



1000 L

#### Fluid - Castrol Transaqua HC 10 and HC 20 Rheology @ Ambient Pressure

	Castrol Transaqua HC 10					Castrol Transaqua HC 20				
Temperature	Density		Kinematic Viscosity	Bulk Modulus		Density		Kinematic Viscosity	Bulk Modulus	
°C (°F)	g/ml	lb/ft³	mm²/s	N/m² (x109)	psi (x105)	g/ml	lb/ft³	mm²/s	N/m² (x109)	psi (x105)
-25 (13)	1.0993	68.63	64.40	2.94	4.27	1.1096	69.27	78.54	3.05	4.43
0 (32)	1.0847	67.72	11.86	2.85	4.13	1.0935	68.26	13.56	2.90	4.21
20 (68)	1.0730	66.99	4.97	2.75	3.99	1.0806	67.46	5.89	2.78	4.03
40 (104)	1.0613	66.25	2.65	2.64	3.83	1.0677	66.65	3.31	2.64	3.83
100 (212)	1.0262	64.06	0.84	2.21	3.21	1.0290	64.24	1.23	2.20	3.19
175 (347)	0.9824	61.33	0.41	1.49	2.16	0.9807	61.22	0.68	1.54	2.24

## TRANSAQUA HT

### Water-based Subsea Production Control Fluid

Castrol Transaqua HT is a water-based hydraulic control fluid specifically formulated for use as the control medium in subsea production control systems. Suitable for:

- Conventional and high pressure.
- Temperature range of -30°C to 180°C.
- Suitable for use within Electro-Hydraulic Multiplex (EH-Mux) or direct hydraulic control systems.
- Entire production and workover control systems, covering Topsides and Subsea applications.

#### Performance Benefits:

- Contains a fluorescent leak tracer to allow rapid detection of subsea leaks
- Maintains corrosion performance with seawater contamination.
- Tolerant of the high well temperatures
- Fully compatible and miscible in all proportions with other products in the Castrol Transaqua range.



Pack Size:

1000 L

## VISCOGEN KL 300

### Synthetic High Temperature Chain Lubricant

Castrol Viscogen KL range are thermally stable synthetic lubricants designed for high temperature lubrication in severe environments where the use of mineral oils or conventional synthetic oils would result in excessive wear, carbonisation and residue formation. Viscogen KL finds use in many industrial applications;

- High-rack storage shelves
- Bakery machines
- Paint lines
- Conveyor chains and so on.

#### Performance Benefits:

- Extremely low evaporation rate, low residue formation and low smoke generation at high temperatures
- High load carrying ability under severe mechanical loads and high temperatures as well as excellent penetration on chains and wire rope strands leading to longer chain life.
- Excellent rust protection, extraordinary oxidation resistance and no hard carbon build.



Pack Size:

0.4 L





# GREASE







## SPHEEROL AP RANGE

Spheerol AP 2 and AP 3 are lithium-based greases incorporating solventrefined base oils. They are primarily intended for use in plain and anti-friction, ball and roller bearings besides other machinery applications. Spheerol AP 3 is suitable for severe vibration conditions.

### Performance Benefits:

- Corrosion inhibitor additives ensure protection of metal surfaces extending bearing life.
- Oxidation inhibitors extend the life of the grease in high temperature applications minimising the need for re-greasing.
- Water resistance ensures good levels of protection in wet applications.

**Pack Sizes:** Spheerol AP 2: 18kg, 50kg, Spheerol AP 3: 0.4kg, 15kg, 18kg

Name	Units	AP 2	AP 3
Thickner Type	-	Lithium soap	Lithium soap
Consistency	NLGI Grade	2	3
Colour	-	Amber/Brown	Amber/Brown
Texture	-	Smooth & homogenous	Smooth & homogenous
Dropping Point	oC/oF	180 min/356 min	180 min/356 min
Base Oil Viscosity @ 40oC/ 104 oF	mm <sup>2</sup> /s	100-130	100-130
Worked Penetration (60 strokes @25oC / 77oF	0.1 mm	265-295	220-250
Anti Rust Performance (Emcor)	Rating	0/1 max	0/1 max
Copper corrosion, 24 hours @ 100oC	Rating	1b max	1b max
Oil separation, 168 hours @40oC (%)	% wt.	5 max	2 max
Water washout, 1 hour @ 79oC	% wt loss	10 max	10 max
Flow pressure @ -20oC/ -4oF	mBar	<1400	<1400





## HIGH TEMPERATURE GREASE

### Multipurpose High Temperature Grease

High Temperature Grease is a high performance, multipurpose lithium complex grease developed using an optimized combination of high quality mineral oil, proprietary thickener technology and a specially selected additive system.

#### Performance Benefits:

- Excellent thermal and mechanical stability.
- Good extreme pressure and anti-wear properties provide the potential for prolonged component life.
- Good water resistance provides enhanced protection in applications where the potential for exposure and contamination are higher.
- Good corrosion protection.
- Excellent multipurpose potential enabling a reduction in product inventory.

**Pack Sizes:** 0.4kg, 18kg



## SPHEEROL EPL (EP) RANGE

### Bearing Grease

Castrol Spheerol EPL is a range of greases which comprises lithium based products, containing highly refined mineral oils, fortified with extreme pressure (EP) additives as well as corrosion and oxidation inhibitors.

The Spheerol EPL range comprises general purpose greases designed for plant wide lubrication.

#### Performance Benefits:

- High mechanical stability The grease keeps its consistency in service ensuring long lubricant life.
- Good adhesion Continuous lubrication and reduced consumption as film stays between lubricated surfaces.
- Good water resistance.
- Resistant to copper and steel corrosion.
- Excellent EP and anti-wear properties.

**Pack Sizes:** 0.4kg, 12.5kg, 18kg

Name	Units	EPL 0	EPL 1	EPL 2	EPL 3
Appearance	-	Amber to Brown	Amber to Brown	Amber to Brown	Amber to Brown
Thickener type	-	Lithium	Lithium	Lithium	Lithium
Base Oil	-	Mineral oil	Mineral oil	Mineral oil	Mineral oil
Consistency	NLGI Grade	0	1	2	3
Worked Penetration (60 strokes @25°C/ 77°F)	0.1 mm	355-385	310-340	265-295	220-250
Dropping point	°C °F	160/320	190/374	190/374	190/374
Base Oil Viscosity @ 40°C / 104°F	mm <sup>2</sup> /s	150-200	150-200	150-200	150-200



## SPHEEROL SX 2

### Calcium Complex Grease

Spheerol SX 2 is a complex calcium sulphonate grease providing superior performance benefits in the highly aggressive conditions experienced in the marine environment.

It is suitable for:

- Bearings, wire ropes and open gears usually found in marine environments.
- Wide range of deck equipment where it will protect and lubricate hinges turnbuckles, screws, fair leads.

### Performance Benefits:

Spheerol SX 2 is proven to offer:

- High drop point.
- Excellent protection against corrosion.
- High resistance to sea water wash off.
- Strong adhesion to surfaces.
- A lubricant which is solvent free containing no heavy metals or harmful constituents.

**Pack Size:** 0.4kg, 18kg, 180kg





## SPHEEROL SY 4601

### Super Premium Synthetic Grease

The Castrol Spheerol SY range are lithium complex thickened lubricating greases based on synthetic base fluid. The thickener, together with the synthetic base fluid, make the products suitable for various types of bearing applications including high and low temperature applications.

#### Performance Benefits:

- Outstanding high and low temperature performance
- Very good mechanical stability
- High load carrying capability
- Good corrosion protection

**Pack Sizes:** 18kg

## TRIBOL 4747/220-2

### High-Temperature Grease

Castrol Tribol 4747 with TGOA additive package is a clear multi-service lubricant designed to extend the service life of bearings in:

- Multi-service lubricant for heavy-duty applications of rolling and sliding bearings for temperatures up to 160°C (peak temperatures up to 180°C).
- When loads are moderate to heavy and speeds are slow to moderate.

#### Performance Benefits:

- The lithium complex thickener is characterized by its excellent working and shear stability.
- Excellent thermal stability (dropping point >250 °C).
- The TGOA additives ensure reduced wear, lowered operating temperatures as well as extended service life.

**Pack Size:** 18kg

## BIOTAC MP

### Multipurpose EP Grease

BioTac MP is an environmentally responsible, multipurpose EP grease based on a combination of Lithium Complex thickener technology, biodegradable base oil and an optimised performance additive system.

TM BioTac MP is intended for use in a wide range of applications including:

- Plain bearings
- Wire ropes
- Open gears typically found in marine mooring and cargo winches.

#### Performance Benefits:

- BioTac MP provides a strong oil film to give better protection than a lower viscosity oil, at slow speeds and high loads.
- Good resistance to the effects of salt water and corrosion.

**Pack Sizes:** 18kg



## LM GREASE 2

### Multipurpose EP Grease

Castrol LM Grease 2 is a Multi-purpose, Lithium base grease primarily designed for wheel bearing lubrication. It is an outstanding chassis lubricant and is suitable for automotive applications.

#### Performance Benefits:

- Excellent resistance to changes in consistency.
- Characterized by a smooth texture, low starting torque and high melting point.
- Works successfully at operating temperatures of 120°C and good pump ability at -30°C.
- It has a great affinity to metal surfaces which gives added protection, lubrication and
- resistance to high centrifugal forces.

**Pack Size:** 0.5kg





## **MOLUB ALLOY 777-2 NG**

### **Multipurpose EP Grease**

MOLUB ALLOY® 777 NG greases were designed for very heavy-duty service under severe ambient conditions. They are blended and compounded to withstand shock loads as well as heavy loads, conditions commonly found in the steel and construction industries, in mining and forestry. 777 NG greases are free of antimony, lead, zinc and other heavy metals.

Typical applications are in all types of rolling and sliding bearings, spindles, joint couplings (except for highspeed precision couplings), running gears, cams and general grease lubricating points. It is especially suited for the lubrication of heavy machines e.g. forging presses or hauling machines.

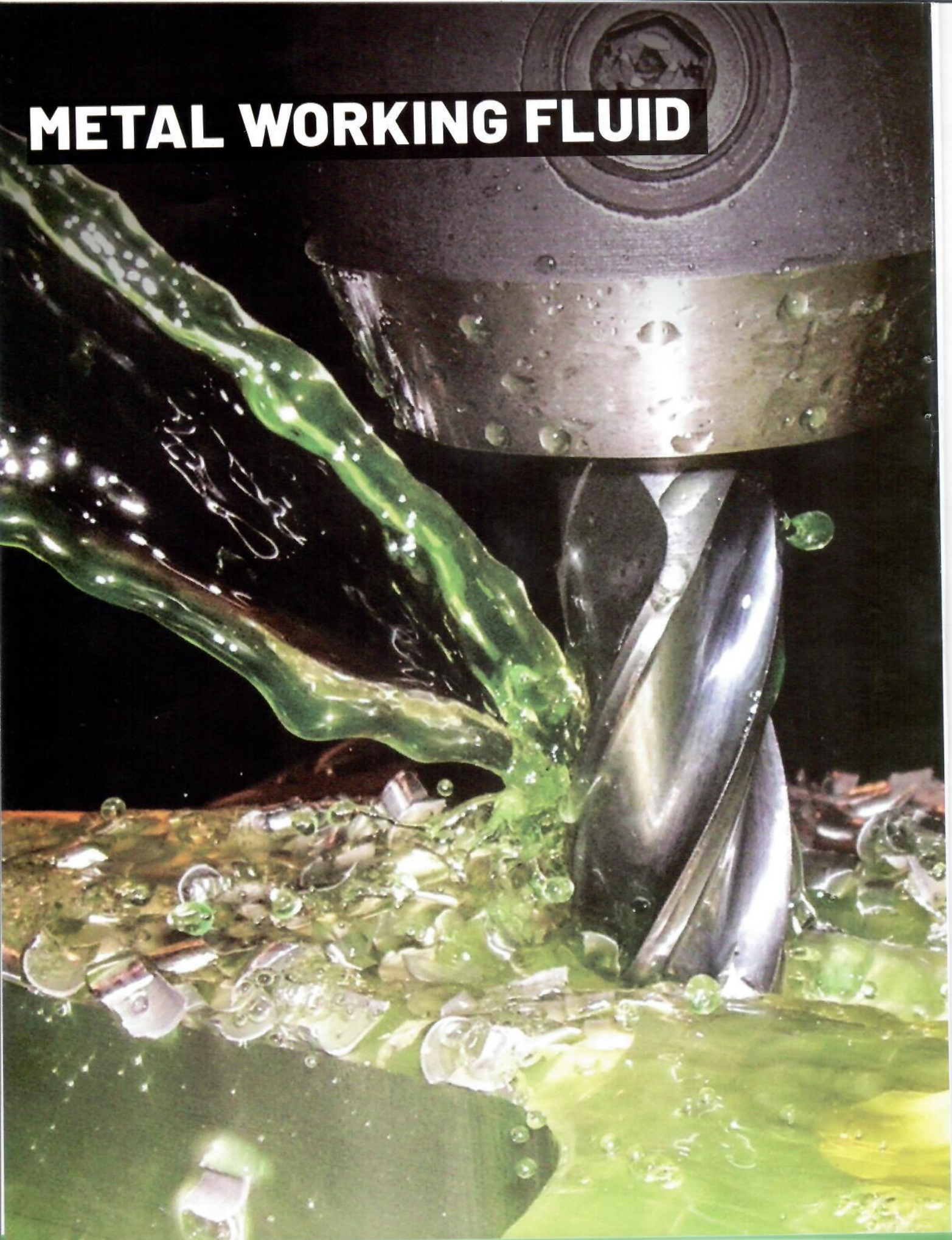
#### **Performance Benefits:**

- Due to their good adhesion these greases provide an optimum sealing effect.
- It achieves reduced friction in the boundary and mixed friction areas. This is most evident during frequent start-ups, low speeds and/or high loads as well as shock loads.
- Overall savings are derived from the above which in turn result in less repair work and downtime, longer service life of components and extended lubrication intervals.

**Pack Size:** 18kg



# METAL WORKING FLUID







## **ALMAREEDGE BI**

### **General Purpose Soluble Metalworking Fluid**

Castrol Almaredge BI is a general purpose soluble metalworking fluid which contains a unique additive package that provides good lubrication properties and performs well in a wide water range.

It is recommended for general machining on low-medium alloy steel and aluminium alloys.

#### **Performance Benefits:**

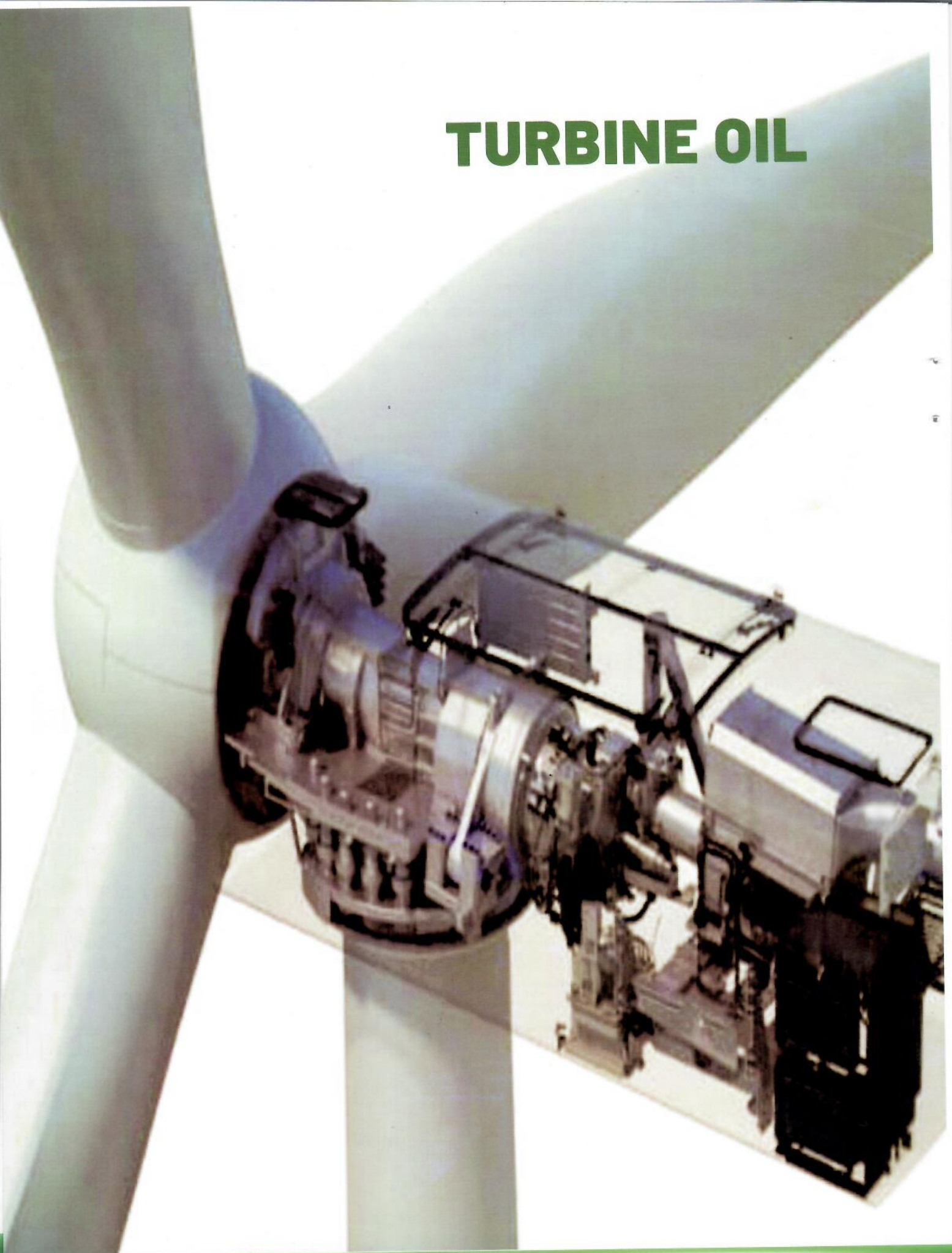
- Boron-free for environmental compliance and improved residue characteristics.
- Chlorine and nitrite free to fulfill your local legislation, waste treatment and environmental requirements.
- Versatile product suitable for wide range of materials and operations.
- Low foam in recommended water conditions

**Pack Size:**



208 L

# TURBINE OIL







## PERFECTO T RANGE

### Turbine Oils

The Castrol Perfecto T range of turbine oils is formulated from highly refined mineral base stocks together with rust and oxidation additives to extend their inherent oxidation stability and corrosion protection. It is primarily intended for the lubrication of steam and lightly loaded industrial gas turbines where anti wear performance is not required and turbo machinery where hydrodynamic lubrication prevails.

#### Performance Benefits:

- Extensive performance history.
- Low foaming tendency and air release properties.
- Good demulsibility and corrosion inhibition performance

#### Pack Size:



20 L



208 L

Name	Units	Perfecto T 32	Perfecto T 46	Perfecto T 68	Perfecto T 100
Product Code		34001	34026	34041	34054
ISO Grade		32	46	68	100
Density @ 15oC	ASTM D4052	0.87	0.88	0.88	0.88
Kinematic Viscosity @ 40oC	ASTM D445	32	46	68	100
Kinematic Viscosity @ 100oC	ASTM D445	5.3	6.7	8.6	10.8
Viscosity Index	ASTM D2270	102	102	102	97



## PERFECTO XEP 32

### Premium Antiwear Turbine Lubricant

The Castrol Perfecto XEP range of turbine oils is formulated from highly refined mineral base stocks together with rust and oxidation additives.

It is suitable for the lubrication of highly loaded industrial gas turbines, aero derivative power turbines & driven machinery and turbo machinery where the lubricants is exposed to high local temperatures during operation and the heat soaking period during run down.

#### Performance Benefits:

- Meets or exceeds a wide range of both steam and gas turbine specifications.
- Excellent thermal/ oxidation stability.
- Good water separation and corrosion inhibition performance.

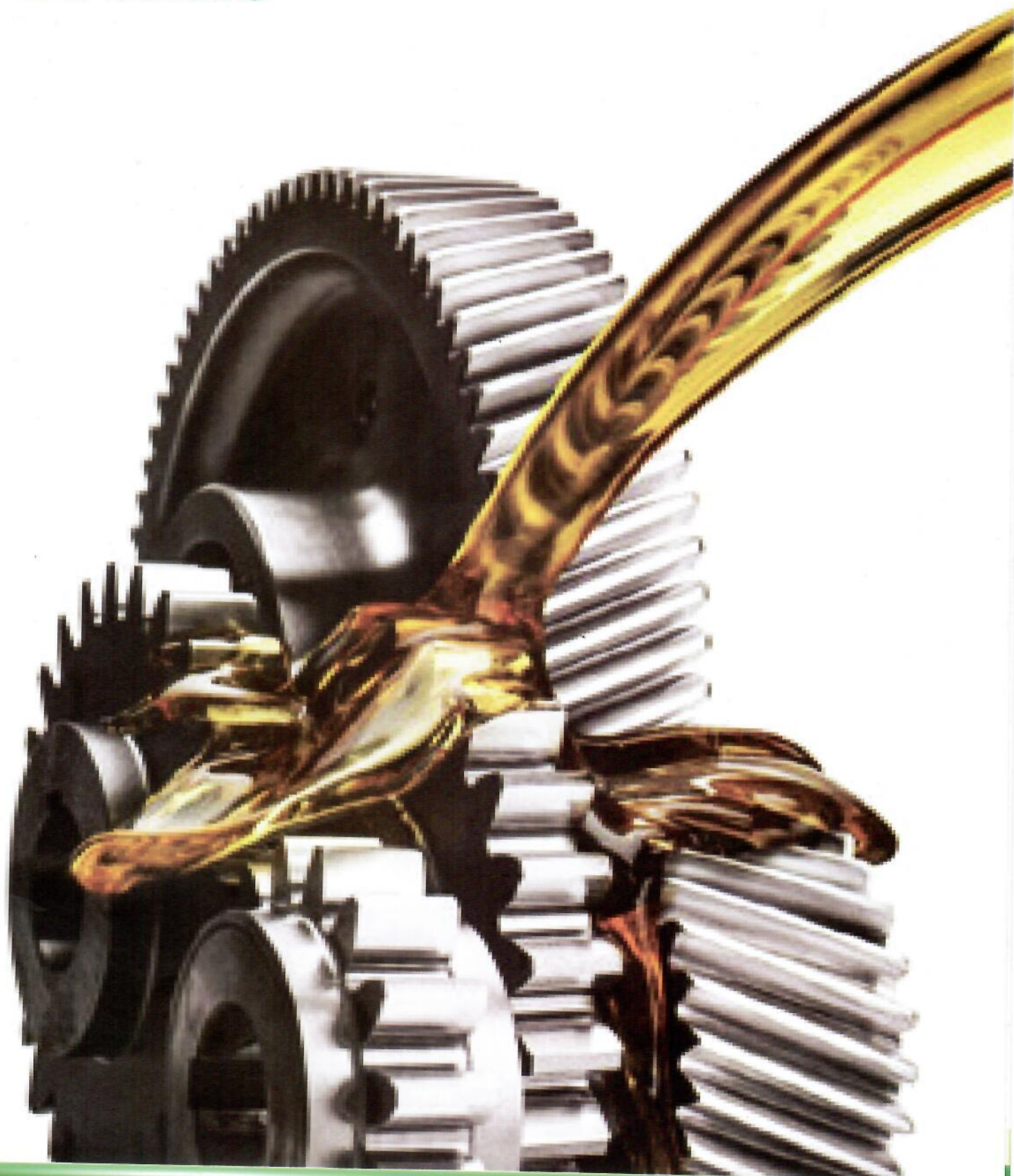
Pack Size:



210 L



# OTHERS





## MAGNA SW 220

### Slideway Oils

Castrol Magna SW 220 (previously called Castrol Magna CF 220) is a specially formulated slideway lubricant to provide all-round performance with good stick-slip and load carrying performance. They combine controlled frictional characteristics with high film- strength and high load carrying properties to eliminate stick-slip

It is suitable for heavily loaded slideway applications or where there is a vertical or inclined slideway. It meets Cincinnati Milacron P50 specification.

#### Performance Benefits:

- Good lubricity prevents stick-slip of slideways.
- High load carrying capacity prevents wear of highly loaded slideways.
- Good demulsification and cutting fluid compatibility can be used in the presence of water or water based metalworking fluids.

#### Pack Size:



210 L



## HYSPIN SPINDLE OIL E 5

### Spindle Oil

Castrol HypsinSpindle Oil E5 is based upon highly refined mineral oil enhanced with rust and oxidation inhibitors and formulated to provide outstanding protection against rust and oxidation while demonstrating good lubricity. This type of oil is also referred to as R and O oil.

Suitable for:

All types of high speed spindle bearings and seal oil system.  
Fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

#### Performance Benefits:

- Good thermal and oxidative stability.
- Good protection of yellow metal and ferrous components helps maintain and prolong equipment life.
- Excellent water separation and hydrolytic.
- Controlled foaming to provide consistent lubrication under the high agitation conditions found in spindle bearings.

#### Pack Size:



20 L



208 L