

## DISCLAIMER

Although all reasonable care has been taken to ensure that the information contained in this publication is accurate at the date of printing, such information is nevertheless liable to variation in the event of changes occurring subsequent to the date of printing, in: the blend formulation; methods of storage; changes resultant from research and development; or due to the improper handling or application of any of the products referred to; or in the requirements of any specification or approval relating to any of the products.

**[www.redlineoil.com.au](http://www.redlineoil.com.au)**

Ask customer to Click on “Oil Recommendations” and  
select vehicle / equipment for full vehicle printout  
including radiator & fuel system!

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## **1.0 RED LINE EXCEEDS WORLD STANDARDS**

**ALL Red Line Synthetic Gear Oil exceeds the following respective requirements.**

API  
GL-1  
GL-3  
GL-4  
GL-5  
GL-6  
MIL-L-2105D

**All Red Line Synthetic Engine Oils meet or exceed the following requirements.**

API            SJ/SH/SG/SF/CF-4/CE/CD/CC/CE/CF/CG-4/CH-4/CI-4  
CCMC        G-4/PO-2/D-3/TG-2/TPD-2/TD-3/E2-96

## **2.0 SPECIFICATIONS**

Limited space precludes a complete list of all specifications met by individual products.

**USERS OF RED LINE PRODUCTS ARE RECOMMENDED,  
AT ALL TIMES, TO REFER TO THE ORIGINAL  
MANUFACTURER'S REQUIREMENT AND OR  
SPECIFICATIONS.**

### **2.1 OPERATION TEMPERATURES**

**The RED LINE product grades shown in the following text are recommendations, which cover ambient temperature operation, e.g. 0 degrees to 35 degrees Celsius. If operating in temperatures that are consistently outside this range, you may need to change to another Red Line product rated for higher or lower temperatures. Contact RED LINE Technical Services for alternative product recommendations.**

## **3.0 QUALITY STANDARDS**

**To indicate the performance level or quality of a lubricant, the American Petroleum Institute (API) has established the following classifications:**

### **3.1 PETROL CRANKCASE CLASSIFICATIONS:**

- SA - Straight Mineral light duty only.
- SB - Minimum duty, anti-scuff fortified.
- SC - Requirements for vehicles up to 1968.
- SD - Requirements for vehicles up to 1972.
- SE - Minimum requirement for most vehicles after 1972.
- SF - Minimum requirements for most vehicles after 1980.
- SG - Minimum requirements for most vehicles after 1988.
- SH - Supersedes all previous 'S' classifications. These oils have stringent test requirements offering significantly improved engine sludge control and wear protection.
- SJ 1997 Gas Engine Warranty Maint Service Standard.
- SL 2003 Gas Engine Warranty Maint Service Standard

### **3.2 DIESEL CRANKCASE CLASSIFICATIONS**

- CA Light duty only.
- CB Early models moderate duty.
- CC Late models moderate only.
- CD Severe duty and supercharged.
- CE Very severe turbocharged duty.
- CF-4 Very severe low emission turbocharged 4-cycle duty.
- CG-4 Very severe duty turbocharged engines meeting '1994 U.S. Exhaust Emission Standards'
- CH-4 Very severe duty - '1999 US Emission Standard'
- CI-4 Latest diesel specs 2003

### **3.3 GEAR OILS CLASSIFICATIONS**

- GL1 Unfortified straight mineral oils.
- GL2 Worm drive anti-wear mineral oils.
- GL3 Spiral bevel axles and some manual transmissions.
- GL4 Hypoid moderate high speed EP oil.
- GL5 Hypoid shock load, high speed and torque EP oil.
- GL5 Plus Please contact Red Line Technical Dept. for classification description.

## **4.0 I DON'T KNOW HOW OIL RATINGS WORK!**

**This section is a simple guide to give you a better understanding of basic terminology and the different types of oils used in the oil industry.**

**Mineral oil is mined or extracted from the earth's natural resources and contains many impurities. Processing and refining of this oil may reduce some levels of the impurities.**

**Synthetic oil is manufactured or man made.**

**There are two types –**

**Type 1 - 100% Synthetic (Red Line) which contains no impurities and can assist in the removing of impurities from an already contaminated system. 100% Synthetic provides ultimate benefits and performance over other synthetic and mineral oils.**

**Type 2 – Most other market brands are in this category and are made from a blend of processed mineral oil and some synthetic base. This oil may therefore still contain impurities.**

### **4.1 GUIDE TO VISCOSITY - SAE SYSTEM**

The numbering system was devised by the Society of Automotive Engineers. It is used to correlate the "thickness" of an oil (the measure of oil's resistance to flow) and the ability to lubricate moving parts at different temperatures. The system has been in use for many years and during 1980 was updated to more accurately describe lubricating oils. Synthetic oils have the best low temperature flow characteristics.

Oil viscosity is measured at both high and low temperatures-

High Temperature: At high temperature (i.e. 100°C) the viscosity measurement is useful in selecting the correct oil to lubricate a working engine.

Low Temperature: At low temperature, the measurement predicts engine cranking or startup characteristics and oil pump-ability. The viscosity measured at low temperature has "W" after the SAE number, eg SAE 15W40.

## 4.2 RED LINE OIL – NATURAL MULTIGRADE

The synthetic base stock of Red Line synthetic oils have a natural multigrade property which means that large amounts of unstable polymeric thickeners, like those use in petroleum oils, are not required to manufacture our multigrades.

Multigrade oils such as 20W50 are formulated to meet the control limits at low temperatures (ie the SAE **20W**-50 rating) and at high temperatures (SAE **20W50**). Multigrade oils provide better lubrication in a wide range of climatic conditions than monograde oils.

## 4.3 ARE ALL SYNTHETICS THE SAME QUALITY?

Red Line Synthetic Oil Corp. is one of the unique, rare manufacturers using significant amounts of **state-of-the-art, Poly-ol-ester base-stocks**. “Base stock” is an oil industry term for the chemical core of any lubricant. *Poly-ol-esters* are the ultimate base-stocks because they are the only types that withstand the tremendous heat and stress, like those present in the hot sections of modern jet engines.

In the battle for profits, other companies cut corners in their synthetic product by making their product almost entirely *poly-alpha-ole-fin* based. This type of synthetic base stock is cheaper and cannot withstand the temperature like that of *Poly-ol-ester* base stock, nor equal *Poly-ol-ester* base stock quality.

## 4.4 COMPATIBILITY

Red Line oil are compatible with all petroleum and most other synthetics, so flushing is not required. Red Line oils are designed to be compatible with seals which were designed for use with petroleum products. Reduced temperatures and improved deposit control should allow longer seal life.

## 4.5 ENVIRONMENTAL IMPACT

The synthetic *Poly-ol-ester* base stocks Red Line use, **completely thermally decompose** in the combustion process, helping to reduce petroleum pollution.

Red Line’s Two Stroke Watercraft Injection oil is bio-degradable, helping our environment.

Red Line’s Diesel Fuel treatment products reduce smoke and diesel emissions by up to 17%.

## 5.0 PRODUCT SUMMARY

### 5.1 WATERWETTER SUPERCOOLANT with Inhibitor (Pink)

**Radiators: Automotive, 4WDs, Small Trucks, Etc.**

**WaterWetter is a unique wetting agent for cooling systems which reduces coolant temperatures by as much as 20°C, reduces cavitation and air pockets. Also cleans & lubricates water pump seals; prevents foaming; complexes with hard water to reduce scale.**

Designed for:

Aluminium, cast iron, copper, brass and bronze cooling systems. \*

Strongly recommended for use in racing industry.

Please contact the Red Line technical department for other applications.

#### BETTER HEAT TRANSFER PROPERTIES

- Can double the cooling system capacity to remove heat, reduces cylinder head temperatures, reduces hot spots and detonation.  
Note: No coolant will reduce the engine temperature below the set thermostat temperature.
- Provides much better heat transfer properties than glycol based anti freeze. Water has almost 2½ times greater thermal conductivity or heat transfer compared to glycol coolants. WaterWetter doubles the wetting ability of water.
- Can be added to new or used anti freeze to improve the heat transfer of ethylene and propylene glycol systems.
- WaterWetter improves heat transfer and does it faster.  
Increasing the flow of heat to the coolant usually increases the efficiency of the engine. Compared times show WW reduces temperature faster than water (took 15% longer) or glycol/water (220/% longer) or 100% glycol (550% longer).

#### RUST & CORROSION PROTECTION

- WaterWetter passes the ASTM D2570 Simulated Service Corrosion Test - the most severe test developed for automotive coolants determined by the ASTM committee to be requirements for adequate cooling system protection.
- WaterWetter reduces rust, corrosion and electrolysis of all metals in plain water. Also prevents cavitation corrosion.

Application:

- One bottle (12floz) will treat up to 18 litres. For best results use with distilled water.
- Change as often as vehicle manufacturer recommends (prevent water turning acidic).
- Can be added to new or used anti-freeze.

WaterWetter offers no anti-freeze protection, so vehicles that will be used in sub zero climates or have an air-conditioner designed to blow cold air through the heater core should have the minimum amount of anti-freeze added to the system. Adding anti-freeze reduces the effectiveness of a cooling system so the minimum requirement should be used.

\*Systems with magnesium components should use only the manufacturer's inhibitor.

Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	METRIC
83522 80204	RL100	WaterWetter Supercoolant with Inh.	12FLOZ	355ml

## **5.2 DIESEL ENGINE WATERWETTER – with NO Inhibitor (Blue)**

**Radiators: Heavy Duty Trucks, Agricultural Machinery, Petrol or Diesel Motors, Etc.**

**This product is purely a temperature reducer and does not contain corrosion inhibitor.**

**Same cooling efficiency improvements as the WaterWetter Supercoolant (pink) see Section 5.1.**

Designed For:

Heavy duty – trucks, machinery, diesel or petrol engines that require a temperature reducer along with using their manufacturer's specified inhibitor. Very effective when thermostat is wide open, such as heavy traffic of climbing long hills. Excellent in trucks needing to reduce auto fan on/off time.

### Application:

One bottle or 15floz will treat up to 56 litres. Add directly to the radiator or expansion tank.

- Change as often as vehicle manufacturer recommends (prevent water turning acidic).
- Can be added to new or used anti-freeze.

WaterWetter offers no anti-freeze protection, so vehicles that will be used in sub zero climates or have an air-conditioner designed to blow cold air through the heater core should have the minimum amount of anti-freeze added to the system. Adding anti-freeze reduces the effectiveness of a cooling system so the minimum requirement should be used.

\*Systems with magnesium components should use only the manufacturer's inhibitor.

### Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	METRIC
83522 80213	RL102	Diesel WaterWetter	15FLOZ	443ml

## **5.3 ENGINE OILS**

**Automotive incl. Petrol, Gas, Diesel; Turbo engines Motorbikes;  
Marine engines.**

**Red Line motor oils are designed to provide the highest degree of protection and cleanliness with the lowest friction across a wide range of engine operating conditions, which may extend engine life by as much as 400%, giving up to four times the service from your vehicle. The synthetic base stocks have a natural multi-grade property, plus superior long-drain capabilities commonly up to 30,000 kms. The high temperature stability makes our motor oil a necessity to properly lubricate a turbocharger or hot-running engine.**

### Designed For:

- Suitable for Petrol, Gas, and Diesels
- For all: automotive, motorcycle; marine engines; turbo.
- Refer to section 5.4 for race applications.

## Available as

**5W20** - Petrol, Gas, NOT Diesel. New – some latest model cars require this spec.

**5W30** – Petrol, Gas, and Diesel. Provides the easiest start-ability and lubricates fastest on startup. Reduces turbo lag and provides more power and economy in a properly functioning engine, while providing thicker oil films than a petroleum 10W40.

**5W40** - Petrol, Gas, and Diesel. New – some latest model cars require this spec.

**10W30** - Petrol, Gas, and Diesel. Reduces turbo lag and provides more power and economy in a properly functioning engine, while providing thicker bearing oil films than a petroleum 10W40.

**10W40** - Petrol, Gas, and Diesel. Best all-weather viscosity grade. Provides oil film thicknesses greater than a petroleum 20W50 in hot weather and exceptional flow properties in cold weather.

## **15W50 &**

**20W50** - Petrol, Gas, and Diesel. The ultimate in high-temperature protection. Recommended for hot-running engines, especially air-cooled engines. Provides 25% more bearing viscosity than petroleum 20W50s.

**15W40 DIESEL ONLY-** Highly resistant to thermal breakdown. Provides double the detergency and acid neutralizing ability of conventional petroleum oils for maximum engine cleanliness. Meets and exceed CI-4 standards.

**20W60HD V-TWIN** (released 2002) for Vtwin engines

## PROTECTION AND CLEANLINESS

Red Line provides the highest degree of protection and cleanliness with the lowest friction for your petrol, diesel, motorcycle or marine engine. Out lasts and out performs all other synthetic and mineral oils in the automotive marketplace.

## TEMPERATURE STABILITY

The high temperature stability makes Red Line motor oil a necessity to properly lubricate a turbocharger or hot running engine. Provides heat transfer at a greater rate than any other oil.

## LONG DRAIN CAPABILITIES

Red Line has superior long drain capabilities and recommends oil changes in a normally functioning engine between 16,000 and 30,000 kms for petrol and 16,000 and 20,000 kms for diesels or at least once a year, whichever is shorter.

Longer periods up to 80,000kms in heavy haulage diesel engines are not uncommon.

### Application:

- Formulation of Red Line oil offers extended drain time, up to 30,000km, depending on the condition of the engine and the use pattern of the vehicle.
- Oil filter changes should remain as per the manufacturer's specifications.
- Using a Red Line oil one grade lighter than a factory specified mineral oil provides the same protection but reduces oil pump load and increases the performance and economy of the engine. Please contact Red Line before attempting.
  - Being a natural multi-grade property means that large amounts of unstable polymetic thickeners, like those used in petroleum oils, are not required to manufacture our multi-grades.

Typical Properties								
	5W20	5W30	5W40	10W30	10W40	15W40	15W50	20W50
API Service Class	SL/SJ/SH	SL/SJ/SH/ CD/CF	SL/SJ/SH/ CD/CF	SL/SJ/SH/ CD/CF/ CH-4/CI-4	SL/SJ/SH/ CD/CF	SL/SJ/SH/ CD/CF/ CH-4/CI-4	SL/SJ/SH/ CD/CF	SL/SJ/SH/ CD/CF
	Petrol, Gas	Petrol Gas Diesel	Petrol Gas Diesel	Petrol Gas Diesel	Petrol Gas Diesel	Diesel Only	Petrol Gas Diesel	Petrol Gas Diesel
Viscosity Grade: SAE	5W20	5W30	5W40	10W30	10W40	15W40	15W50	20W50
Vis @ 100°C, cSt	9.1	10.9	15.1	10.7	14.6	14.5	19.6	19.8
Vis @ 40°C, cSt	55	67	94	70	98	97	138	148
Viscosity Index	145	153	170	142	154	155	162	155
CCS Viscosity, Poise	50 @-30°C	60 @-30°C	55 @- 30°C	65 @-25°C	65 @-25°C	65 @-20°C	65 @-20°C	50 @-15°C
HTHS Vic, cP @ 150°C ASTM D4741	3.3	3.8	4.6	3.8	4.7	4.7	5.8	6.1
Pour Point, °C	-45	-45	-45	-45	-45	-45	-45	-45
Pour Point, °F	-49	-49	-49	-49	-49	-49	-49	-49
Flash Point, °C	251	252	250	250	248	252	252	255
Flash Pont, °F	484	486	480	480	478	486	486	491
NOACK Evaporation Loss, 1hr @ 250°C (482°F), %	8	6	6	6	6	6	6	6

Complies with all major diesel engine builders requirements including CCMC, PD-2, D-3, TPD-2, TD-3, E3-96

Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 15204	RL103-1	5W20 ENGINE OIL	QRT	0.946 Ltrs
83522 15205	RL103-4	5W20 ENGINE OIL	1G	3.784 Ltrs
83522 15304	RL104-1	5W30 ENGINE OIL	QRT	0.946 Ltrs
83522 15305	RL104-4	5W30 ENGINE OIL	1G	3.784 Ltrs
83522 15404	RL105-1	5W40 ENGINE OIL	QRT	0.946 Ltrs
83522 15405	RL105-4	5W40 ENGINE OIL	1G	3.784 Ltrs
83522 11304	RL106-1	10W30 ENGINE OIL	QRT	0.946 Ltrs
83522 11305	RL106-4	10W30 ENGINE OIL	1G	3.784 Ltrs
83522 11404	RL108-1	10W40 ENGINE OIL	QRT	0.946 Ltrs
83522 11405	RL108-4	10W40 ENGINE OIL	1G	3.784 Ltrs
83522 11504	RL110-1	15W50 ENGINE OIL	QRT	0.946 Ltrs
83522 11505	RL110-4	15W50 ENGINE OIL	1G	3.784 Ltrs
83522 12504	RL112-1	20W50 ENGINE OIL	QRT	0.946 Ltrs
83522 12505	RL112-4	20W50 ENGINE OIL	1G	3.784 Ltrs
83522 21404	RL114-1	15W40 DIESEL ENGINE	QRT	0.946 Ltrs
83522 21405	RL114-4	15W40 DIESEL ENGINE	1G	3.784 Ltrs
83522 21406	RL114-20	15W40 DIESEL ENGINE	5G	18.920 Ltrs
83522 12604	RL113-1	20W60 V-TWIN ENGINE	QRT	0.946Ltrs
83522 12605	RL113-4	20W60 V-TWIN ENGINE	1G	3.784 Ltrs

## 5.4 ENGINE OILS - RACING

**Race Engines: Automotive, Turbo, Motorbikes, Marine, Etc.**

**Red Line Race Oils have gained a reputation world wide as the ultimate racing lubricant. Red Line Oil has the ability to lubricate hot metal. Makers of other lubricants unsuccessfully claim to be as good as Red Line.**

### HIGH TEMPERATURE LUBRICATION

Our race oils are made with the most thermally stable synthetic base stocks available and provide the best high temperature lubrication and a higher film strength than any petroleum or synthetic product marketed.

## MORE POWER

Red Line racing oils allow 2-4% more power than oil of similar viscosity.  
Each reduction in viscosity grade allows 1-2% more power.

To reduce the chance of detonation our race oils contain very few detergents or carbon / bypass fuel stabilisers, and therefore are **not recommended for everyday street use**.

### Available As:

**SAE 5 (0W5)**- ultra light weight oil for small engines and qualifying only.

**SAE 10 (0W10)**- for drag racing and circle track qualifying where the lowest internal friction is desired.

**SAE 20 (5W20)** - for drag racing, circle track qualifying and race engines designed for low-viscosity oils.

**SAE 30 (10W30)**- suitable in well-balanced racing engines for sustained high-speed use where low internal friction is desired. Ideal for smaller turbo engines.

**SAE 40 (15W40)** - for use where temperatures may be high and when a wide range in R.P.M.s and speeds will be encountered.

**SAE 50 (15W50)** - for use where extremely high temperatures may be encountered and when engine durability is the primary concern such as air cooled engines.

**SAE 60 (20W60)** - for alcohol fueled engines.

**SAE 70 (25W70)** - for top-fuel drag (nitromethane fueled) engines.

Typical Properties						
	10 WT	20 WT	30 WT	40WT	50 WT	60 WT
Viscosity Grade: SAE	0W10	5W20	10W30	15W40	15W50	20W60
Vis @ 100°C, cSt	5.1	7.5	11.2	15	19	23
Vis @ 40°C, cSt	25.3	42	72	99	127	162
Viscosity Index	133	140	145	160	169	171
CCS Viscosity, Poise	25@ -30°C	30@ -25°C	33@ -20°C	30@ -15°C	33@ -15°C	30@ -10°C
Pour Point, °C	-54	-50	-45	-45	-45	-40
Pour Point, °F	-65	-58	-49	-49	-49	-40
Flash Point, °C	215	265	270	275	272	270
Flash Point, ° F	420	509	518	527	522	518
NOACK Evaporation Loss, 1hr @ 250°C 482°F, %	9	6	6	6	6	6

Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 10004	RL115-1	SAE 5 RACE ENG OIL	QRT	0.946 Ltrs
83522 10005	RL115-4	SAE 5 RACE ENG OIL	1G	3.784 Ltrs
83522 10104	RL116-1	SAE 10 RACE ENG OIL	QRT	0.946 Ltrs
83522 10105	RL116-4	SAE 10 RACE ENG OIL	1G	3.784 Ltrs
83522 10204	RL117-1	SAE 20 RACE ENG OIL	QRT	0.946 Ltrs
83522 10205	RL117-4	SAE 20 RACE ENG OIL	1G	3.784 Ltrs
83522 10304	RL118-1	SAE 30 RACE ENG OIL	QRT	0.946 Ltrs
83522 10305	RL118-4	SAE 30 RACE ENG OIL	1G	3.784 Ltrs
83522 10404	RL120-1	SAE 40 RACE ENG OIL	QRT	0.946 Ltrs
83522 10405	RL120-4	SAE 40 RACE ENG OIL	1G	3.784 Ltrs
83522 10504	RL121-1	SAE 50 RACE ENG OIL	QRT	0.946 Ltrs
83522 10505	RL121-4	SAE 50 RACE ENG OIL	1G	3.784 Ltrs
83522 10604	RL122-1	SAE 60 RACE ENG OIL	QRT	0.946 Ltrs
83522 10605	RL122-4	SAE 60 RACE ENG OIL	1G	3.784 Ltrs
83522 10705	RL123-4	SAE 70 RACE ENG OIL	1G	3.784 Ltrs

## 5.5 GEAR OILS & TRANSAXLE LUBRICANTS

**Refer Recommendation Section *back of book* -Automotive, 4WD, Motorbikes, Etc.**

**Red Line gear oils are designed to provide excellent low temperature shiftability and improved gear protection at high temperatures.**

Designed For:

Refer to the back section - cross-referencing sheets and your vehicle manual for the best Red Line product to suit your particular vehicle / machine.

Please contact the Red Line technical department for other applications.

### REDUCED TEMPERATURE

Red Line gear oil will reduce differential temperatures 5-30 degrees Celsius with efficiency improvements of between 1-5% typical. The synthetic base stocks used have tremendous thermal stability and provide the best film strength available along with gear protection at higher temperatures.

## CARRY HIGHER LOADS

The unique combination of base stocks and additives allows Red Line gear and transmission oil to carry higher loads compared to petroleum lubricants.

## EXTENDED USAGE OF OIL

The stability of these products allows them to be used for extended periods.

## LSD COMPATIBILITY

All Red Line gear oil are LSD compatible except for oil which have NS after their weight (refer to note below). This stands for “Not Slippery” or no friction modifier added.

Note - If you want your LSD to grip more effectively, an NS oil can be used, but, **WARNING-** LSD could *clunk or chatter* on every day driving. RED LINE friction modifier part number RL176 can be added to eliminate chatter.

## Available as:

**MTL** designed for use in **manual transmissions** or **transaxles** (front wheel drives) which recommend 75w 80 GL4 gear oil. Improves gearbox shiftability. Can be used where Dextron or Mercon Auto Fluids are called for in manual gearboxes. MTL is **not for use in rear wheel drive differentials**.

**MT90** designed for use in **manual transmissions** or **transaxles** (front wheel drives) which recommend a 75W90 GL4 gear oil (SAE 10W40 engine oil viscosity). Improves gearbox shiftability, especially gearboxes which call for SAE50.

**SUPERLIGHT SHOCKPROOF**– see Shockproof Gear Oils Section 5.7

**LIGHTWEIGHT SHOCKPROOF**– see Shockproof Gear Oils Section 5.7

**75W90 GEAR OIL**- recommended for most street driven and racing differentials. Excellent performance in conventional and limited-slip units. Also for limited-slip manual transaxles which require a 90 WT oil. Contains limited-slip friction modifiers.

**75W90NS** (NS stands for “Not Slippery”) recommended for manual transmissions and nonlimited-slip transaxles that recommend 90 WT oils. Can be used in racing limited-slip units to increase lockup and reduce wheel spin. Street-driven rear-wheel drive, LSD cars should use regular Red Line 75W90 or 80W140. Exceeds GL5 & GL6 specs.

**75W140NS** (NS stands for “Not Slippery”) recommended for manual transmissions and non limited-slip transaxles that recommend 140 WT oil. Can be used in racing limited-slip units to increase lockup and reduce wheel spin. Street-driven rear-wheel drive, LSD cars should use regular Red Line 75W90 or 80W140. Exceeds GL5 & GL6 specs.

**80W140 GEAR OIL**- recommended for heavily-loaded commercial hauling, low-speed differentials including limited-slip, problem limited-slip units, and where reduction of limited-slip chatter or gear noise deadening is required. Good for racing applications, which see tremendous torque at low speeds.

Typical Properties						
	MTL	MT90	75W90	75W90NS	80W140	75W140NS
API Service Category	GL4	GL4	GL5+	GL5+	GL5+	GL5+
Viscosity Grade: SAE (Gear Oil)	75W/80W	75W90	75W90	75W90	80W140	75W140
Viscosity Grade: SAE (Engine Oil)	5W30	15W40				
Vis @ 100°C, cSt	10.2	14.7	16.2	14.8	26	26
Vis @ 40°C, cSt	50.8	91.7	120	98	231	192
Viscosity Index	171	168	145	160	144	171
Brookfield Viscosity, Poise	160	400	1100 @-40°C	600 @-40°C	500 @-26°C	1200 @-40°C
Pour Point, °C	-50	-45	-45	-45	-41	-45
Pour Point, °F	-58	-49	-50	-50	-42	-50
Flash Point, °C	232	240	216	216	218	216
Flash Point, ° F	450	465	420	420	425	420

Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 50204	RL132-1	MTL® GEAR OIL	QRT	0.946 Ltrs
83522 50205	RL132-4	MTL® GEAR OIL	1G	3.784 Ltrs
83522 50206	RL132-20	MTL® GEAR OIL	5G	18.920 Ltrs
83522 50207	RL132-64	MTL® GEAR OIL	16G	60.544 Ltrs
83522 50304	RL134-1	MT-90 GEAR OIL	QRT	0.946 Ltrs
83522 50305	RL134-4	MT-90 GEAR OIL	1G	3.784 Ltrs
83522 50306	RL134-20	MT-90 GEAR OIL	5G	18.920 Ltrs
83522 50307	RL134-64	MT-90 GEAR OIL	16G	60.544 Ltrs
83522 57904	RL136-1	75W90 GEAR OIL	QRT	0.946 Ltrs
83522 57905	RL136-4	75W90 GEAR OIL	1G	3.784 Ltrs
83522 57906	RL136-20	75W90 GEAR OIL	5G	18.920 Ltrs
83522 58104	RL138-1	80W140 GEAR OIL	QRT	0.946 Ltrs
83522 58105	RL138-4	80W140 GEAR OIL	1G	3.784 Ltrs
83522 58106	RL138-20	80W140 GEAR OIL	5G	18.920 Ltrs
83522 58107	RL138-64	80W140 GEAR OIL	16G	60.544 Ltrs
83522 58304	RL142-1	75W90NS GEAR OIL	QRT	0.946 Ltrs
83522 58305	RL142-4	75W90NS GEAR OIL	1G	3.784 Ltrs
83522 58306	RL142-20	75W90NS GEAR OIL	5G	18.920 Ltrs
83522 57104	RL144-1	75W140NS GEAR OIL	QRT	0.946 Ltrs
83522 57105	RL144-4	75W140NS GEAR OIL	1G	3.784 Ltrs
83522 57106	RL144-20	75W140NS GEAR OIL	5G	18.920 Ltrs

## 5.6 DIFFERENTIAL FRICTION MODIFIER & BREAK-IN ADDITIVE

**Reduce L.S.D. chatter and aid break-in of any new differential.**

Designed for:

Can be added to any gear oil to reduce temperature during break-in and prevent gear softening. Can also be used to perfectly tune an L.S.D.

Please contact the Red Line technical department for other applications.

Application: Add product until L.S.D chatter disappears or 4% of volume.

For the break-in of new crown wheel & pinions 4% - 8%.

Note- too much friction modifier can reduce the lockup in limited slip units, so it should only be used if needed. This additive should not be necessary in the 75W90 or the 80W140 Gear Oils, since they already contain this additive, but in some units more is required.

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 80301	RL176	FRICTION MODIFIER	4FLOZ	118ml

## 5.7 SHOCKPROOF GEAR OILS & TRANSAXLE LUBRICANTS

Refer Recommendation Section *back of book*

-Automotive, 4WD, Motorbikes, Marine, Trucking, Machinery, Etc.

**Red Line Synthetic ShockProof provides unequalled protection for high performance differentials and transmissions, which are heavily loaded or which see shock-loading. The revolutionary lubricant technology is completely different from conventional lubricant technology. ShockProof contains a unique solid dispersion, which cushions gear teeth to help prevent tooth breakage and allows the use of lower viscosity.**

### TEMPERATURE REDUCTIONS

Significant reductions are common including race application in circle track, road and off-road racing.

### PROTECTION

ShockProof Gear Oil has a 40% lower coefficient of friction and 250% the load-carrying capacity compared to conventional gear oil, which means that metal-to-metal friction is greatly reduced.

These ShockProof lubricants provide much greater viscosity in the thin layers between the gear teeth, but have very low internal fluid friction, which means very little power loss for the protection achieved.

Designed for:

Heavily-loaded differentials and transmissions. Highly recommended for racing differentials and transmissions, which see shock-loading. Provides unequalled results in road train and heavy haulage applications.

Available as:

**SUPERLIGHT SHOCKPROOF GEAR OIL** –Can be rated as a 70W90 gear oil, but has the lower internal fluid friction of an ATF. Can be used to obtain maximum power transfer in racing differentials, which do not see extremely high temperatures.

**LIGHT WEIGHT SHOCKPROOF GEAR OIL** - Can be rated as a 75W140 gear oil but has the lower internal fluid friction of an SAE 30 motor oil. Can be used to obtain maximum power transfer in racing differentials, which do not see extremely high temperatures.

**HEAVY SHOCKPROOF GEAR OILS** - Can be rated as a 75W250 gear oil, but has the lower internal fluid friction of an SAE 75W90.

**L.S.D. - WARNING**

Red Line Shockproof is the most advanced technology in gear oil in the world but for some limited slip differentials it does not contain enough friction modifying additive. The use of Red Line Shockproof in some L.S.D.'s may produce a click or clunk when turning at slow speeds (everyday driving). This means the L.S.D. cones or clutches are **working more effectively than normal**. The addition of Red Line friction modifier Part No.RL176 will eliminate the noise and still give you the most advanced and advantageous gear oil available. Alternatively, use Red Line 75W90 or 80W140 gear oil which already contains this friction modifier.

Typical Properties			
	SUPERLIGHT SHOCKPROOF	LIGHTWEIGHT SHOCKPROOF	HEAVYWEIGHT SHOCKPROOF
API Service Category			
Viscosity Grade: SAE			
Vis @ 100°C, cSt	*Not Determined	*Not Determined	*Not Determined
Vis @ 40°C, cSt	*Not Determined	*Not Determined	*Not Determined
Viscosity Index			*
Brookfield Viscosity, Poise			1400 @-40°C
Pour Point, °C			-30
Pour Point, °F			-45
Flash Point, °C			240
Flash Point, °F			435
Density, g/cc, 15°C			0.94
Calcium, wt			4
Phosphorous, wt			0.2
Molybdenum, %wt			0.6

\*Heavy Shockproof Gear Oil, being a non-newtonian fluid, cannot use ASTM D445 to measure the viscosity. The viscosity varies with the size of tube used. There is no common analytical technique which can accurately measure the viscosity. The low temperature properties are not designed for temperatures below -25°C.

Available as

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 58504	RL146-1	SUPER L/W SHOCK GEAR	QRT	0.946 Ltrs
83522 58505	RL146-4	SUPER L/W SHOCK GEAR	1G	3.784 Ltrs
83522 58506	RL146-20	SUPER L/W SHOCK GEAR	5G	18.920 Ltrs
83522 58404	RL148-1	LIGHTWEIGHT SHOCKPRF	QRT	0.946 Ltrs
83522 58405	RL148-4	LIGHTWEIGHT SHOCKPRF	1G	3.784 Ltrs
83522 58406	RL148-20	LIGHTWEIGHT SHOCKPRF	5G	18.920 Ltrs
83522 58204	RL150-1	HVY SHOCKPROOF GEAR	QRT	0.946 Ltrs
83522 58205	RL150-4	HVY SHOCKPROOF GEAR	1G	3.784 Ltrs
83522 58206	RL150-20	HVY SHOCKPROOF GEAR	5G	18.920 Ltrs
83522 58207	RL150-64	HVY SHOCKPROOF GEAR	16G	60.544 Ltrs
83522 58208	RL150-220	HVY SHOCKPROOF GEAR	55G	208.120 Ltrs

## 5.8 AUTOMATIC TRANSMISSION FLUID

Refer Recommendation Section *back of book* -Automotive, 4WD, Etc.

**Provides smoother shifting. Allows higher temperature operation without varnishing. Allows for extended drain times or service intervals.**

Available as:

**Synthetic A.T.F.** – product is an originally approved GM Dexron II, Ford Mercon, and Mercedes Benz Automatic Transmission Fluid and is suitable for GM, late model Ford, or any vehicle which recommends Dexron II-D and II-E.25120; or Mercon M930212 type C.J. or type H; Allison C-3 and C4; Caterpillar TO-2; Voith; ZF;. A higher viscosity allows optimal operation at 70°F higher temperature providing better torque converter efficiency. Perfect for heavily loaded vehicles, superior stability allows high temperature operation without varnishing valves and or clutches.

**C + A.T.F.** – satisfies the performance requirements of Chrysler MS7176, ATF+ ATF+2, ATF +3 while providing 30% greater operating viscosity. Has improved oxidation and sludge protection.

**D4 A.T.F.** – is suitable for use where Dexron III, Dexron II (D & E required by G.M.), or Mercon fluids are recommended. Usage- in freezing to normal operating temperatures. The superior stability compared to petroleum ATFs allows high-temperature operation without varnishing valves and clutches which leads to transmission failure. Includes Chrysler, AMC, Toyota, Nissan, Honda, V.W., Mazda Ford and other trans requiring Mercon, Type CJ or Type H fluid. Allison C-3 C-4 Caterpillar TO-2, Voith and ZF.

**Hi Temperature ATF** – Suits the requirement of D4ATF but has usage in normal to severe operating temperatures, providing smoother and consistent shifts for extended drain intervals. Perfect for heavily loaded vehicles, which see high temperatures.

**Racing A.T.F.** – contains no slipperiness additives producing faster shifts and quicker lockup. Can be used where type F fluids are recommended or for racing transmissions, which require quicker shifts than provided with Dexron or Mercon type fluids. A higher viscosity compared to conventional Type-F transmission fluids provides higher torque converter efficiency at higher temperatures and the enhanced extreme-pressure protection provides five-times better film strength when compared to petroleum ATFs, reducing gear and clutch wear considerably.

<b>Typical Properties</b>					
	<b>D4ATF</b>	<b>Synthetic ATF</b>	<b>High Temp ATF</b>	<b>Racing ATF</b>	<b>C+ ATF</b>
Recommended use:	Dexron III / Mercon	Dexron II / Mercon	Dexron III / Mercon	Ford Type F	Chrysler Mopar 7176
API Service Category	GL4		GL4		
Vis @ 100°C, cSt	7.5	7.2	10.0	10.0	7.5
Vis @ 40°C, cSt	34.4	32.5	53.9	56.0	32.3
Viscosity Index	198	197	172	170	213
Brookfield Viscosity @ -40°C, Poise	52	45	175	180	38
Pour Point, °C	-60	-51	-51	-50	-60
Pour Point, °F	-76	-60	-60	-58	-76
Flash Point, °C	225	224	232	232	222
Flash Point, °F	437	435	450	450	432

### Available As

<b>BAR CODE</b>	<b>CODE</b>	<b>ITEM</b>	<b>UNIT SIZE</b>	<b>UNIT SIZE METRIC</b>
83522 30304	RL124-1	RACING ATF AUTO TRANS	QRT	0.946 Ltrs
83522 30305	RL124-4	RACING ATF AUTO TRANS	1G	3.784 Ltrs
83522 30306	RL124-20	RACING ATF AUTO TRANS	5G	18.920 Ltrs
83522 30104	RL126-1	SYN ATF DEXII AUTO TRANS	QRT	0.946 Ltrs
83522 30105	RL126-4	SYN ATF DEXII AUTO TRANS	1G	3.784 Ltrs
83522 30604	RL127-1	C+ ATF AUTO TRANS	QRT	0.946 Ltrs
83522 30605	RL127-4	C+ ATF AUTO TRANS	1G	3.784 Ltrs
83522 30504	RL128-1	D4 ATF DEXIII AUTO TRANS	QRT	0.946 Ltrs
83522 30505	RL128-4	D4 ATF DEXIII AUTO TRANS	1G	3.784 Ltrs
83522 30506	RL128-20	D4 ATF DEXIII AUTO TRANS	5G	18.920 Ltrs
83522 30507	RL128-64	D4 ATF DEXIII AUTO TRANS	16G	60.544 Ltrs
83522 30204	RL130-1	HIGH TEMP ATF AUTO TRANS	QRT	0.946 Ltrs
83522 30205	RL130-4	HIGH TEMP ATF AUTO TRANS	1G	3.784 Ltrs
83522 30206	RL130-20	HIGH TEMP ATF AUTO TRANS	5G	18.920 Ltrs

### **AUTOMATIC TRANSMISSION FLUID - More Explanation**

There is a lot of confusion within the automotive industry regarding the differences between auto trans. oil grades i.e. Why can't you use Dexron III in a Ford B.T.R. auto trans. or a Mitsubishi Magna? Why does one oil producer call for an F Type fluid in an early Ford FMX and another say Dexron III will be okay?

**In simple terms**, it relates to the friction co-efficiency of the fluid. I.e. the ability of the friction seals or bands in an automatic transmission to stop slipping or slip more, when they are brought into contact with each other.

This relates to you, as the end user, feeling either a very sudden or jerky gear change or a long slow change, which appears in some cases to be slipping.

An automatic F Type fluid (Red Line Racing ATF) has the least amount of slippery additives in its package allowing a very sudden crisp gear change. This is very suitable for performance or racing transmissions (could be called a shift kit in a can), but would not be suited to a luxury vehicle that advertises smoothness.

All other auto trans. fluids, i.e. Dexron II, Dexron III, D Type, M Type, Type 95 have varying degrees of slippery additive in them to suit the requirements of a particular manufacturer, which relates to the type of material he uses for friction purposes. The fluid properties often overlap from one manufacturer to another, so in some cases a company will have one fluid to meet the requests of three cars, say Holden, Ford BT R Type & Mitsubishi Magna, whereas another oil company will need three different fluids to meet the requirements.

*Dex IV – There is talk of this new rating however the specifications are still under draft. (1/7/02).*

<b><u>Quick Red Line Guide to ATF's</u></b>	
<b>DexronII or D Type</b>	<b>= Red Line Synthetic ATF</b>
<b>Dexron III</b>	<b>= Red Line D4ATF or Red Line HiTemp ATF</b>
<b>C+</b>	<b>= Red Line C+ ATF</b>
<b>M Type</b>	<b>= HiTemp ATF</b>
<b>Type 95</b>	<b>= HiTemp ATF</b>
<b>F Type</b>	<b>= Red Line Racing ATF</b>

**WARNING To ALL Drag Racers, Teams, Auto Trans Builders.**

- 1) When using Racing ATF in stall testing situations, it is a common habit to bring the engine up to trans. stall revs on wide open throttle, to check the tune while in the pits. **This habit is disastrous for transmission fluids, as the temperature rise in the Torque Converter is around 60°C per second.**

Unlike launching on the stall, when you return to idle the transmission is not circulating the oil, so the oil in the converter doesn't cool - it just boils and degenerates. In contrast to stalling on a launch, the oil temperature

rises dramatically but then during the course of the run, the trans. oil temperature is actually reducing.

- 2) Another habit that is **detrimental for the trans. oil, is racers switching their engine OFF on the finish line.** The pump in the trans. stops pumping and again the oil in the torque converter rises dramatically in temperature and can go black.

**Explanation of ATF fluid going Black.**

Red Line use what we consider to be the best additive package to prolong life and give maximum extreme pressure resistance, but at around 240°C (475°F) a temperature which under normal race conditions should never be reached, part of the package will blacken or burn, maybe giving off a bad odour.

Extreme pressure and extreme temperature are two different issues. Other less effective extreme pressure packages that don't burn at 475°F, don't give the extreme pressure advantages for the success of the fluid during normal operating and racing situations. If a lesser extreme pressure additive is used, the fluid might look okay after stationary wide open throttle stall in the pits, but you can be sure it won't be looking after your expensive racing trans. while racing.

<b>TWO STROKE - QUICK GUIDE</b>							
<b>TWO STROKE OIL</b>	Water	Air	Reduce Smoke	Low Ash Spec	NMA TC-W3 Spec	More Power	Designed For:
	COOLED						
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

**5.9 TWO STROKE KART OIL**

**All Kart Racing. Red Line 2 Stroke Kart Oil has the same specifications as Red Line Two Stroke Race Oil but is labeled separately for Karting Industry. See next Section 5.10 – TWO STROKE RACE OIL for specs.**

<b><u>Fuel / Oil Ratio Chart.</u></b>	
18:1=	275ml of Oil to 5 Litres of Fuel.
20:1=	250ml of Oil to 5 Litres of Fuel.
25:1=	200ml of Oil to 5 Litres of Fuel.
30:1=	165ml of Oil to 5 Litres of Fuel.
40:1=	125ml of Oil to 5 Litres of Fuel.

**Application: (Guide Only)**

*Classes:*

<i>Midgets</i>	Age 7-10 yrs,	Engine: Comer S80.	Oil Ratio: 30:1
		Engine: Yamaha KT100J.	Oil Ratio: 40:1
<i>Rookies</i>	Age 10-12 yrs,	Engine: Yamaha KT100J.	Oil Ratio: 40:1
<i>Junior National</i>	Age 12-16 yrs	Engine: Yamaha KT100J.	Oil Ratio: 25:1
<i>Junior Clubman</i>	Age 12-16 yrs	Engine: Yamaha KT100S.	Oil Ratio: 20:1
<i>Junior Piston Port</i>	Age 12-16 yrs	Engine: (Many Makes)	Oil Ratio: 18:1
<i>Senior National.</i>		Engine: Yamaha KT100J.	Oil Ratio: 25:1
<i>Senior Clubman.</i>		Engine: Yamaha KT100S.	Oil Ratio: 20:1
<i>Senior Piston Port.</i>		Engine: (Many Makes).	Oil Ratio: 18:1
<i>Formula 100.</i>		Engine: (Many Makes).	Oil Ratio: 18:1
<i>200cc Super.</i>		Engine: (Many Makes).	Oil Ratio: 18:1

Carburetor Jet Settings are based on Driver preference or plug reading.

**Available As**

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40403	RL156	TWO CYCLE KART OIL	16FLOZ	473ml
83522 40405	RL156-4	TWO CYCLE KART OIL	1G	3.784 Ltrs

<b>TWO STROKE - QUICK GUIDE</b>							
<b>TWO STROKE OIL</b>	Water	Air	Reduce Smoke	Low Ash Spec	NMA TC-W3 Spec	More Power	Designed For:
	COOLED						
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

## 5.10 TWO STROKE RACE OIL

**Competition Motorbikes, Racing Outboards, Jetskiis, Karts, Etc.**

**The ultimate in 2-cycle performance. Improved power and perfect cleanliness. Power improvements of 3-5% can be obtained. Two-Stroke Racing Oil, provides the cleanliness of low deposit oil, but is formulated with additional lubricity to keep even the highest-revving engines perfectly clean. Two Stroke Racing Oil can be used as a premix or as an injection oil.**

### Designed For:

High performance & high R.P.M. Motorcycles / Competition / Road Bikes / Racing Outboards. Extremely popular lubricant for jet skis, where it provides very crisp throttle response. Jet ski users should always refer to manufacturer's specifications.

### CLEAN BURNING

Two stroke race oil is extremely popular with Motorcross riders as the clean burning properties of the product provides a very crisp throttle response.

### 2-3% INCREASE IN POWER

Will not leave sticky residue in expansion chambers and on the rear of the bike. Dyno tests have shown 2-3% improvement in power, using a fresh engine, but the actual improvement is considerably greater compared to other lubricants. As the engine wears and develops deposits, which restrict ring mobility and increase back-pressure in the exhaust, the power output declines. But with Red Line Two stroke race oil the reduced wear keeps the engine fresh and the complete absence of deposits keeps output high.

<b>TWO STROKE - QUICK GUIDE</b>							
<b>TWO STROKE OIL</b>	Water	Air	Reduce Smoke	Low Ash Spec	NMA TC-W3 Spec	More Power	Designed For:
	COOLED						
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

### REDUCED WEAR

Measurement of lower-end bearing wear has shown that two stroke race oil provides less wear after 7 hours than racing castor or other synthetics after only 45 mins.

## LEANEST OIL / FUEL RATIO

Red Line two cycle lubricants will allow the leanest oil:fuel ratio of any product on the market. If other lubricants have successfully operated at, for example 50:1, then the Red Line lubricant for that application can also be used at the same ratio. After reviewing the performance at a given ratio, the amount of oil can be reduced slightly, to determine whether the reduced ratio is satisfactory or whether additional decreases can be achieved.

A significant advantage of the Red Line Two-Cycle lubricants is that rich oil:fuel mixtures can be used without significantly altering the combustion characteristics of the fuel and still provide excellent throttle response.

## **NEW RING SEATING**

Red Line Two-Stroke Racing Oil generally should not be used to seat a new ring because of the extreme slipperiness of the lubricant. A petroleum two-cycle lubricant used at normal loads for 15 minutes should be adequate for ring seating. Red Line Two-Stroke Oils can be used for ring seat if the engine is operated at 80% load for 15 minutes immediately after start up. Red Line is compatible with petroleum lubricants, so system flushing is not necessary.

### Application:

#### MIX RATIOS

Proper mix ratios should be determined by the engine builder for the application being considered. Choosing the proper mix ratio depends on bearing and piston design, piston clearance, rpms, and air:fuel ratio. Higher rpm engines and those operating at high cylinder temperature require more oil in the fuel to maintain proper lubrication. When switching to Red Line Oil, begin with the same ratio at which other lubricants have operated successfully.

As a starting point, the Two Stroke Racing Oil is generally operated at ratios between 16:1 to 32:1. The Two Stroke Racing Oil is used at mixtures of 24:1 to

32:1 for 9500 rpm outboard race motors, 50:1 for high output operation, and up to 100:1 if the engine is properly designed for reduced oil mixtures.

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40603	RL154	TWO STROKE RACE OIL	16FLOZ	473ml
83522 40605	RL154-4	TWO STROKE RACE OIL	1G	3.784 Ltrs

<b>QUICK GUIDE</b>							
<b>TWO STROKE OIL</b>	Water	Air	Reduce	Low Ash	NMA TC-	More	Designed For:
	COOLED		Smoke	Spec	W3 Spec	Power	
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

## 5.11 TWO STROKE ALLSPORT

**Motorcycles, Snowmobiles, Garden equipment, Chainsaws, Etc.**

**A LOW ASH biodegradable lubricant designed for air and water-cooled performance engines which require a LOW ASH oil and not an NMMATC-W3 oil. Is incredibly clean and increases power & performance.**

(For Water-cooled, outboards and NMMATC-W3 requirements see next Section 5.12 Two Stroke Watercraft Oil)

Designed for:

- Designed for stock to moderately modified motorcycle, snowmobiles, garden equipment and chainsaws or any two cycle engine which recommend a low-ash type of lubricant.
- Recommended for high performance stock or slightly modified engines and where ISO GD, JASO FC, or API TC lubricants are recommended.
- Air or watercooled performance engines which require a **low ash oil** and not an NMMA TC-W3 oil – see Watercraft section 5.12 for this.

- Suitable for Rotax / Seadoo (@ over 800cc) applications. \*\*Rotax/Seadoo change oil specifications halfway through their jetski range. Click on “Oil Recommendations” at [www.redlineoil.com.au](http://www.redlineoil.com.au) for individual jetski Red Line recommendation and a printout)

**Not designed for outboard use** - use Red Line Watercraft oil- see section 5.12

#### BIO-DEGRADABLE

The synthetic ester base stocks are biodegradable as determined by tests acceptable to European and American Environmental Agencies, providing significantly less water pollution than petroleum two cycle lubricants.

#### HIGH TEMPERATURE STABILITY

The properties are the same as the Watercraft Oil, but uses a low ash chemistry which provides better cleanliness in higher temperature **air-cooled** engines, whereas the Watercraft Oil provides better cleanliness in lower temperature water cooled engines.

#### UP TO 3% MORE POWER

This is a high performance all synthetic formula which is designed to provide maximum power and the greatest protection and cleanliness in **WATER COOLED and AIR COOLED** two cycle engines.

#### SUPERIOR RUST PROTECTION

The rust protection of this product is far superior to BIA or NMMA lubricants.

#### Application:

Dissolves in fuel and remains soluble indefinitely.

Red Line Allsport Oil may be run in ratios between 16:1 and 100:1 depending on rpms and engine manufacturer requirements.

#### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40803	RL158	TWO STROKE ALLSPORT	16FLOZ	473ml
83522 40805	RL158-4	TWO STROKE ALLSPORT	1G	3.784 Ltrs

## TWO STROKE - QUICK GUIDE

TWO STROKE OIL	Water	Air	Reduce Smoke	Low Ash Spec	NMA TC-W3 Spec	More Power	Designed For:
	COOLED						
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

### 5.12 TWO STROKE WATERCRAFT OIL

**For Watercraft / Jetskiis / Outboards, etc.**

**A two stroke that meets NMMA TC-W3 requirements; as an ashless, *bio-degradable*, lubricant that is a high performance all synthetic formula which is designed to provide maximum power and the greatest protection and cleanliness in lower temperature WATER-COOLED two cycle engines.**

Designed for:

- Designed for water-cooled performance outboards and personal watercraft which recommend a NMMA TC-W3 Lubricant.
- Suitable for self mixing (pre-mix) or injection systems.
- This can be used in any two cycle outboard engine up to 10,000 rpms. (**\*\*Except Rotax/Seadoo over 800cc which changes oil specifications halfway through their jetski range and requires a low ash oil –See previous section 5.11 *Two Stroke Allsport* or click on “Oil Recommendations” at [www.redlineoil.com.au](http://www.redlineoil.com.au) for Seadoo recommendation and a printout)**)
- (Air cooled refer to- Two Stroke Race Oil & Two Stroke Allsports.)

#### BIO-DEGRADABLE

The synthetic poly-ol-ester base stocks are biodegradable, as determined by tests acceptable to European and American Environmental Agencies, providing significantly less water pollution than petroleum two cycle lubricants.

## HIGH TEMPERATURE STABILITY

This lubricant has excellent high temperature stability - much more stable than petroleum TC-W3 oil or other types of synthetics - **providing less smoke**, cleaner spark plugs, and cleaner pistons. These basestocks are combined with ashless deposit control and anti-scuff additives to prevent ring sticking and scuffing under extreme temperatures and keep the piston and exhaust ports clean.

## 3% MORE POWER

The slipperiness of Red Line Watercraft injection Oil can produce up to 3% more power and can provide significantly longer bearing life than when using NMMA TC-W3 Oils or other Synthetics, even in oxygenated reformulated fuels.

## SUPERIOR RUST PROTECTION

The rust protection of this product is far superior to BIA or NMMA lubricants which make it suitable for marine use.

### Application:

Dissolves in fuel. Red Line can be used as an injection or pre-mix oil and will dissolve in fuel and remain soluble indefinitely.

### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40705	RL162-4	WATERCRAFT	1G	3.784 Ltrs
83522 40706	RL162-20	WATERCRAFT	5G	18.920 Ltrs

## QUICK GUIDE

TWO STROKE OIL	Water	Air	Reduce	Low Ash	NMA TC-	More	Designed For:
	COOLED		Smoke	Spec	W3 Spec	Power	
SMOKELESS	YES	YES	YES+	YES	NO	YES	Motorcycles Stock Std, Garden equipment, chainsaws, smoke problems
ALLSPORT	YES	NO	YES	YES	NO	YES	Motorcycles Stock (incl high perf.) to slightly modified, ISO GD, JASO FC, API TC, Snowmobiles, Garden Equip, chainsaws, (plus Seadoo >800cc)
WATERCRAFT	YES	NO	YES	NO	YES	YES	Watercraft, Outboards up to 10,000rpm, Jetskiis -(except Seadoo >800cc)
RACE & KART	See description		YES		NO	YES	Competition inc. modified -Motorbikes, Racing Outboards, Jetskiis, cont. high RPM over 10,000rpm, Kart Racing.

### 5.13 TWO CYCLE SMOKELESS

**Smoke problem: Motorbikes, Mowers, WhipperSnippers, Chainsaws, etc.**

**All Red Line two-cycle lubricants are very low smoke products but with Synthetic Smokeless, smoke is virtually non-existent. For watercooled and air cooled two cycle engines. This is a high performance synthetic with low ash chemistry which provides better cleanliness in higher temperature air-cooled engines. Can be used for injection or pre-mix.**

Designed for:

- Designed for stock standard to moderately modified motorcycles.
- Garden equipment including mowers, whipper-snippers, chainsaws, etc.
- Also air-cooled two cycle engines which require a low ash oil not an NMMA TC-W3. *Modified racing engines should use Red Line Two-Stroke Racing oil. Engines recommending TC-W3 lubricants should use Red Line Watercraft Injection Oil.*
- Recommended for high performance stock or slightly modified engines and where ISO GD, JASO FC, or API TC lubricants are recommended. **Not designed for outboard use** -see instead Watercraft Injection oil- refer Section 5.12.

INCREASE POWER

The slipperiness of Red Line Smokeless Oil can produce more power and significantly longer bearing life than when using manufacturer's oils or other synthetics. (Note All other Red Line Two Stroke Oils provide more power production again.)

#### HIGH TEMPERATURE LUBRICATING

This lubricant has excellent high temperature lubricating ability and provides significantly longer bearing life than when using manufacturer's oil or other synthetics.

#### REDUCED WEAR AND SCUFFING

These base stocks are combined with low-ash deposit control and anti-scuff additives to prevent ring-sticking and scuffing under high temperatures and keep the piston and exhaust ports clean. Also the power valves and spark plugs.

#### ENVIRONMENTAL

Helps reduce petroleum pollution. Smoke is virtually non-existent.

#### COMPATIBLE WITH PETROLEUMS AND SYNTHETICS.

Can be used for injection or pre-mix oil and will dissolve in gasoline and remain soluble indefinitely.

Application: May be run in ratios between 16:1 and 100:1 depending on rpms and engine manufacturer requirements. Can be used as an injection or premix oil and will dissolve in gasoline and remain soluble indefinitely.

#### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40903	RL160	TWO STROKE SMOKELESS	16FLOZ	473ml
83522 40905	RL160-4	TWO STROKE SMOKELESS	1G	3.784 Ltrs

## 5.14 TWO CYCLE ALCOHOL PREMIX

**Use with Alcohol & Methanol fuels: Model engines, Formula 500s, Motorbikes, Model Aeroplanes, Etc.**

**Excellent lubricity for alcohol or methanol fuels. Provides the same lubricating properties as Red Line Two Stroke Racing Oil, but does not contain the detergents designed for engine cleanliness, due to the cleanliness in a methanol engine. Is otherwise comparable to Two Stroke Race oil.**

Designed for:

**For use with methanol fuels.** Excellent product for model engines which use alcohol/nitro fuels - Formula 500s, motorcycles, model aeroplanes etc.

### IMPROVED POWER

Designed to provide fuel system cleanliness and improvements in power and efficiency.

### HIGH TEMPERATURE LUBRICATION

This lubricant has excellent high temperature lubricating ability and provides significantly longer bearing life than when using manufacturer's oils or other synthetics. Red Line products have a high degree of thermal stability.

Application:

As per engine builder's specification. Generally used at leaner oil:fuel mixtures than in petrol engines, because of the greater fuel:air ratios used with methanol.

Please contact the Red Line technical department for other applications.

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 40504	RL167	TWO CYCLE ALC' PREMIX	QRT	0.946 Ltrs

## 5.15 FOUR CYCLE ALCOHOL FUEL LUBE

**Use with Alcohol & Methanol fuels: Four Cycle Engines.**

**Red Line Alcohol Fuel Lubricant for four cycle engines is a high performance synthetic which is designed to provide maximum power and reduce wear. Provides excellent lubricity for alcohol or methanol fuels to prevent upper cylinder wear and fuel system corrosion.**

Designed for:

Designed for four cycle engines - mixing with alcohol or methanol fuel. Note – Not detected by normal fuel test. Do not use with catalytic converters.

### INCREASED POWER AND REDUCED WEAR

The lubricating properties will increase power by reducing ring, fuel pump, and piston friction and will significantly reduce ring and fuel pump wear and cylinder leakdown.

Methanol and other alcohols are extremely “dry” and will wash conventional lubricants away from the cylinder walls and valve guides. Red Line alcohol fuel lube contains lubricants which will displace alcohol on steel and aluminum surfaces and are combined with anti-scuff additives to reduce ring wear and piston scuffing under extreme washdown.

### EXCELLENT RUST PROTECTION

Reduces corrosiveness of fuel.

### LUBRICATES INJECTORS AND PUMPS

Application:

Mixes easily in alcohol. One bottle treats up to 208 litres.

30ml per 38 litres will reduce fuel friction by 32% and reduce fuel wear by 63%.

See bottle for other dose ratios.

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 41102	RL165	ALCOHOL FUEL LUBE 4-CYC	12FLOZ	355ml

## 5.16 FOUR CYCLE KART OIL-(RACING ONLY)

**Four Cycle Engines incl. Briggs & Stratton, Honda, Etc.**

**Red Line Four Cycle Kart Oil most importantly improves power & performance in four cycle engines through a dramatic reduction in friction and wear. Provides excellent high temperature lubrication.**

Designed for:

Designed for use in four cycle racing karts - Briggs & Stratton, Honda, etc.

Compatible with both gasoline and alcohol fuels.

For other four cycle engines, see also Stationary Engines (Generators, Cement Mixers, Power Plants etc).

Please contact the Red Line technical department for other applications.

### 2–6% INCREASE IN POWER

Dyno test information demonstrates between 2–6% increase in power depending on RPM and clearance of the engine.

### HIGH TEMPERATURE LUBRICATION

Red Line Four Cycle Kart Oil uses synthetic poly-ol-esters to provide excellent high temperature lubrication. These poly-ol-esters are the current jet turbine lubricants and can withstand temperatures at least 100° greater than PAG (poly alkalene glycol) lubricants.

### BETTER RING SEALING

Enhanced thermal stability provides better ring sealing, less ring and cylinder wear and excellent cylinder head cleanliness. Most find engines last several times as long between rebuilds as when using the PAG lubricants.

\*PAG's chemistry provides little lubrication in the upper ring area, causing greater ring and cylinder wear **in contrast to Red Line Four Cycle Kart Oil.**

*\*PAG's – Most 4 cycle kart oils are based on synthetic poly alkalene glycol chemistry (PAG) because of low deposit forming tendency of these products. They completely decompose at relatively low temperatures and leave little residue. However, this low temperature of thermal decomposition also makes them poor lubricants in the high temperature upper ring area.*

Application: Add as per engine builder's specifications

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 41204	RL157-1	FOUR STROKE KART OIL	QRT	0.946 Ltrs

**5.17 SUSPENSION FLUID**

**Shock Absorbers: Motorcycle, 4x4 Cars, Race Cars.**

**Red Line suspension fluids change very little with temperature and provide lower operating temperatures. Foaming resistance is excellent. Will operate unchanged many times longer than other suspension fluids.**

Designed for:

All shock absorbers, motorcycle, 4x4 cars and race cars.

Please contact the Red Line technical department for other applications.

**LOWER OPERATING TEMPERATURES**

Red Line suspension fluids change very little with temperature and provide lower operating temperatures. The foaming resistance is excellent and the slippery synthetic base stocks provide little seal drag.

**RESISTS FOAMING AT HIGH TEMPERATURES**

**RESISTS THERMAL BREAKDOWN**

**Available in five grades:**

- **LikeWater** equal to zero weight. The LikeWater provides the least viscosity change of any commercial suspension fluid and will operate unchanged many times longer than other suspension fluids.
- **Extra light** equal to 2.5 weight
- **Light weight** equal to 5 weight
- **Medium weight** equal to 10 weight
- **Heavy Suspension Fluid** equal to 30 weight

Application:

All weights can be mixed to create in-between or desired weights, creating the ultimate suspension tuning. For further information please contact Red Line Pty Ltd.

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 91102	RL184	SYN SUSPENSION LIKEWATER	16FLOZ	473ml
83522 91105	RL184-4	SYN SUSPENSION LIKEWATER	1G	3.784 Ltrs
83522 91112	RL186	SYN SUSPENSION EXTRALIGHT	16FLOZ	473ml
83522 91122	RL188	SYN SUSPENSION 5WT LIGHTWEIGHT	16FLOZ	473ml
83522 91132	RL190	SYN SUSPENSION 10WT MEDIUM	16FLOZ	473ml
83522 91142	RL192	SYN SUSPENSION 30WT HEAVY	16FLOZ	473ml

## **5.18 POLYCOMP COMPRESSOR LUBRICANTS**

**Compressor units, Stationary Engines, Cement Mixers, Power Plants, Etc**

**Provides excellent resistance to carbon formation . Lasts typically 5 times longer and can provide approximately 5% improvement in compressor efficiency. Significant improvements in cold starts.**

Designed for:

All compressor units regardless of size, Stationary Engines, Cement Mixers, Power Plants, etc

Please contact the Red Line technical department for other applications.

Application: Use as a complete oil fill, not an additive. Follow original manufacturer's weight requirements.

Available in

SAE10-ISO32, SAE20-ISO62, SAE30-ISO100

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 31104	RL194-1	POLYCOMP COMP' SAE10	QRT	0.946 Ltrs
83522 31204	RL196-1	POLYCOMP COMP' SAE20	QRT	0.946 Ltrs
83522 31304	RL198-1	POLYCOMP COMP' SAE30	QRT	0.946 Ltrs

## 5.19 C.V.2 SYNTHETIC EXTREME PRESSURE GREASE

**C.V.'s incl. Automotive & Race; Equipment: Industrial, Farm, Marine; Wheel bearings: Boat trailers.**

**Possesses a very high melt point. Excellent water wash-out resistance for high temperature and high load. Can be used in temperatures ranging from minus 38°C to 190°C. Excellent for wheel bearings, including boat trailers, high angle C.V.'s and industrial equipment. and for race applications.**

**The exceptional performance and fluidity allows increases in bearing life of 200% - 800%**

Designed for:

Industrial, farm, marine, automotive and race. Wheel bearings, boat trailers, high angle C.V.'s and industrial equipment. Excellent for race applications.

Please contact the Red Line technical department for other applications.

Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 80401	RL180	CV-2 GREASE-JAR	14OZ	400gms
83522 80402	RL178	CV-2 GREASE-TUBE *	14OZ	400gms
83522 80406	RL178-20	CV-2 GREASE-PAIL	5G	18.920 Ltrs

\*14oz tube to suit 400g Grease Gun (Coventrys Part No TEC400);

## 5.20 ASSEMBLY LUBE

**Assembly Applications e.g. Bearings, Piston skirts, Camshafts, Gears, Etc.**

**Provides three times greater film strength than conventional black molybdenum disulfide greases will not clog filters. Excellent rust inhibitor allowing the storage of parts for years.**

### Designed for:

Use in all engine assembly applications e.g. bearings, piston skirts, camshafts, gears. All metals including bearings, use with petroleum or synthetic oils.

For storing metal components to eliminate rust and corrosion.

Please contact the Red Line technical department for other applications.

### Application:

As required in engine building.

### Available as:

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 80312	RL152	ASSEMBLY LUBE TUB	4OZ	114 gms
83522 80311	RL152-1/2	ASSEMBLY LUBE SM TUB	1/2OZ	14.2gms

## 5.21 85 Plus & Diesel Fuel Catalyst DIESEL ADDITIVES

**Diesel Motors, Etc.**

**Both raise cetane numbers, reduce smoke, promote better combustion, lubricate and significantly lengthen injector and pump life. Smoother engine operation. All Red Line fuel additives are E.P.A. registered.**

**85 PLUS – DIESEL FUEL ENHANCER - Helps restore lost power up to 5 %. Reduces wear up to 80% compared to untreated fuel. Boosts cetane numbers by 5 – 9. For best results use continually.**

**DIESEL FUEL CATALYST – Further dramatic reduction in smoke. Reduces wear up to 75% compared to untreated fuel. Improves cetane rating (similar to octane in petrol) by 3 – 7 numbers. For best results use continuously.**

**BOTH are similar products but 85 Plus does not contain smoke suppressant, but rather it contains additional cetane improvers.**

Designed for:

Diesel fuel treatment & improvement.

For bulk treatments see RL2 & RL3 Diesel Additives

**UP TO 3-5% IMPROVEMENT IN FUEL EFFICIENCY.**

Helps prevent fuel system problems,

Boosts cetane by 3 – 9 numbers (similar to octane in petrol).

Reduces friction by up to 50%

Reduction of wear by up to 80% over untreated fuel.

**REMOVES WATER FROM FUEL**

One bottle will remove up to 3 oz water from the fuel system. Water is a necessary ingredient for bacterial growth.

**ENGINE IMPROVEMENTS**

Lubricates injectors and pumps, cleans injectors;

Reduces engine knocking and nailing;

Reduces smoke up to 18% and diesel emissions up to 17% in CO;

Reduces friction up to 50% and wear up to 75% compared to untreated fuel. Power gains of 3 – 5% have been obtained in field tests.

**EMISSION CONTROL**

EPA Emission test have shown:

5% reduction in H.C.

17% reduction in C.O.

18% reduction in smoke.

### Application:

Diesel Fuel Catalyst - One bottle to 75 litres for cleanup, One bottle to 378 litres for anti-wear cleanliness & efficiency. One 12oz bottle will remove 3 oz water from the fuel system.

85 Plus One bottle to 94 litres for cleanup. One bottle to 378 litres for anti-wear, cleanliness and efficiency. One 12oz bottle will remove 3 oz water from the fuel system.

For bulk treatments see RL2 & RL3 Diesel Additives.

### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 70102	RL164	DIESEL FUEL CATALYST	12FLOZ	355ml
83522 70105	RL164-4	DIESEL FUEL CATALYST	1G	3.784 Ltrs
83522 70802	RL166	85 PLUS - DIESEL FUEL ENHANCER	12FLOZ	355ml
83522 70805	RL166-4	85 PLUS - DIESEL FUEL ENHANCER	1G	3.784 Ltrs

## **5.22 RL-2 & RL-3 DIESEL ADDITIVES**

**Heavy Duty Diesel Motors: Agricultural, Fleet Use, Storage Tanks, Etc.**

**Red Line's diesel fuel technology addresses the problems of declining fuel quality as diesel equipment manufacturers continue to reduce tolerances. Ideal for lubricating and overcoming problems with new low sulphur diesel fuels.**

**EPA registered for use in diesel fuel. Meets environmental standard 40 CFR 79:21**

**RL-2 A lubricant & detergent with expected efficiency improvements of approx. 5%. Very effective detergent for cleaning injectors & reducing exhaust emissions.**

**RL-3 Contains the same lubricant & detergent as RL-2, but with additional cetane improver, which will increase the cetane level of a fuel from 4 to 7 cetane numbers. Expected efficiency improvements in the range of 6–7%. Reduces engine knocking and assists cold starting.**

### Designed for:

Excellent for treating storage tanks and preventing fuel degradation Stabilizes diesel fuel and will also clean sludge from old storage tanks and help prevent the forming of sludge. This is a fleet concentrate version of 85 Plus. Improves overall performance of diesel machinery, commercial haulage transporters, heavy industrial equipment.

### IMPROVES FUEL ECONOMY & POWER

RL-2 & RL-3 both improve efficiency by 5-7% relative to untreated fuel.

Increases the power output by approximately 5% by improving the lubrication ability of the diesel fuel.

Fleet tests have shown increases in fuel economy of 3-4% plus.

### IMPROVES ENGINE EFFICIENCY & START-UP

Helps prevent low temperature filter-plugging.

Improves start-up, warm-up, and reduces noise. The additional cetane of RL-3 reduces the knocking noise which is heard from a diesel engine.

### REDUCES WEAR AND FRICTION

RL-2 can reduce the friction of diesel fuel by 48%.

Wear reduction of additive in diesel - RL-2 approx. 68%, RL-3 approx. 80%.

Will significantly increase the life of the injector and reduce scoring on the injector plungers by a factor of 2 to 3.

### CLEANS INJECTORS & REDUCES EXHAUST EMISSIONS

Maintains injector, ring, and engine cleanliness, dramatically improving injector flow.

Cold warm-up particulate smoke in tests has been reduced by 59% after RL-2 treatment.

### REDUCES RUST & CORROSION

Red Line additives contain corrosion inhibitors, which will help prevent rust and corrosion of the fuel system even in the presence of water.

### REMOVES WATER FROM THE FUEL SYSTEM

Removes controlled amounts of water from fuel tanks. For significant water problems see Red Line Water Remover.

Application:

Normal - 443 ml (15oz) treats 1135 Litres (300G) or 3.784 L (1G) treats 9687 Litres (2560G).

Cleanup - 443 ml (15oz) TREATS 378 LTRS (100G)

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 70303	RL200	RL2 DIESEL IMPROVER ADDITIVE	15FLOZ	443ml
83522 70305	RL200-4	RL2 DIESEL IMPROVER ADDITIVE	1G	3.784 Ltrs
83522 70505	RL300	RL3 DIESEL ADDITIVE	1G	3.784 Ltrs

See table below for dosage rates.

<b>Diesel Litres</b>	<b>Normal treatment 0.001 = 1ml</b>	<b>Cleanup treatment 0.001 = 1ml</b>
1	0.001	0.002
40	0.016	0.047
50	0.020	0.059
60	0.024	0.071
70	0.028	0.083
80	0.032	0.094
90	0.036	0.106
100	0.040	0.118
110	0.043	0.129
120	0.047	0.141
150	0.059	0.176
200	0.079	0.235
300	0.118	0.352
400	0.157	0.469
500	0.196	0.586
1,000	0.391	1.172
1,500	0.586	1.758
2,000	0.782	2.344
4,000	1.563	4.688
5,000	1.954	5.860
9,687	3.784	11.353
10,000	3.907	11.720
20,000	7.813	23.440
30,000	11.719	35.159
40,000	15.626	46.879
50,000	19.532	58.598
75,000	29.297	87.897
100,000	39.063	117.196

## 5.23 DIESEL FUEL BIOSTAT

**Microbial control in all diesel applications esp. storage tanks.**

**A potent anti-microbial agent to kill and inhibit the growth of microbes in diesel fuel. Red Line Diesel Fuel Biostat will not harm exhaust particulate filters or oxidizer traps and contains no alcohol. Ideal for the occasional cleanup of diesel systems.**

Designed for:

Sterilizing severely contaminated fuel in all diesel applications for microbial control. Ideal for treatment of storage tanks.

Please contact the Red Line technical department for other applications.

Application:

Pour entire contents of 12oz bottle into tank at time of fill-up. Bottle treats 38-100 litres of fuel. Use high dosage for severe contamination, low dosage for prevention. .  
100PPM for fuel preservation  
200PPM for moderate contamination  
400PPM for severe contamination.

Litre Fuel	100 PPM	200 PPM	400 PPM
20	1.7	3.5	7.0
50	4.4	8.7	17.4
100	8.7	17.4	34.8
200	17.4	34.8	69.6
500	43.5	87	174
1000	87	174	348
2500	250	500	1 L
10,000	1 L	2 L	4 L
20,000	2 L	4 L	8 L
40,000	4 L	8 L	16 L

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 70702	RL168	DIESEL BIOSTAT ANTI MICROBES	12FLOZ	355ml
83522 71005	RL168-4	DIESEL BIOSTAT ANTI MICROBE CONC.	1G	3.784 Ltrs

## 5.24 LEAD SUBSTITUTE

**Motors requiring leaded fuels incl: Cars, Trucks, Farm Equipment, Outboards, Race engines. Etc.**

**Mixes with unleaded fuels to make a fuel alternative or substitute to “Super” and or “LRP” (lead replacement petrol), for engines which require leaded fuels. Provides the protection of high leaded fuel and will not damage catalytic converters.**

Product functions by depositing a sodium oxide coating on the valves which prevents metal contact, just as lead oxides coated the valves. Engines designed for leaded fuel and running with inadequate levels of lead can fail in as little as 60 hours.

Designed for:

Automotive, trucks, farm equipment, outboard motors.

Also race engines which suffer from excessive valve seat wear and piston scuffing when operated on low-lead or unleaded fuels.

Please contact the Red Line technical department for other applications.

Application: One bottle 12 oz treats 454 litres of unleaded or premium unleaded fuel used in regular driving. Big engines or engines working harder, towing etc, need to increase dosage accordingly.

For fuel system cleanup, use 1 bottle Red Line SI-1 cleaner (See also Section 5.27) in full tank of fuel. SI-1 is compatible with Red Line Lead Substitute so add the required dose of Red Line Lead Substitute as per usual.

Unleaded fuel Litres	Normal use Minimum dose ml	Unleaded fuel Litres	Normal use Minimum Dose ml
5	4	75	59
10	8	80	63
15	12	85	66
20	16	90	70
25	20	95	74
30	23	100	78
35	27	150	117
40	31	200	156
45	35	250	195
50	39	300	235
55	43	350	274
60	47	400	313
65	51	450	352
70	55	454	355

Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 60202	RL169	LEAD SUBSTITUTE	12FLOZ	355ml

## 5.25 FUEL SYSTEM WATER REMOVER & ANTIFREEZE

**Diesel or Petrol fuel esp. Storage Tanks.**

**Disperses water in diesel fuel or gasoline to eliminate condensation in fuel tanks and prevent water freezing in fuel lines or filters – a major cause of engine shutdown or poor start ability in cold weather.**

Designed for:

Diesel or Petrol fuels, storage tanks etc.

For Gel & Waxing problems – use Red Line Antigel (Section 5.26).

### WATER DISPERSES

One ounce of Water Remover in 75 litres of fuel will remove 1 ounce of water. 2 Ounces of Water Remover will remove 2 ounces of water. The volume added is linear to the amount of water removed.

### ANTIFREEZE

Reduces freezing point to  $(-21)^{\circ}\text{C}$  in equal proportions.

### PREVENTS RUST & CORROSION

Assists preventing damage to injectors and pumps.

### IMPROVES ENGINE BY 2-3%

Reduces friction sufficiently even in dry fuel to provide diesel engine efficiency improvement up between 2-3%.

Application: One bottle 12 oz treats 189 – 945 litres (50 – 250 US gallons) depending on the amount of water being eliminated. For Anti Freeze results, 12 oz treats 945 litres.

Recommendation is to treat tanks all year long with RL-2 and in winter time treat for specific problem – Water condensation or freezing, Gelling, Waxing.

### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 60302	RL163	WATER REMOVER & ANTIFREEZE	12FLOZ	355ml

## 5.26 RL ANTI-GEL

### Diesel fuel problems: Wax, Gel & Water Freezing.

**Improves low temperature operations of diesel engines. Contains an effective wax crystal modifier to help prevent diesel fuel gelling and to significantly improve the low-temperature operation of a diesel engine. Removes controlled amounts of water.**

#### Designed for:

Diesel fuel where waxing, gelling and or water freezing in the fuel is being experienced.

#### PREVENTS WAXING

Will prevent wax from setting in the fuel tank, allowing a significant improvement in the ability to warm-up after starting, before wax plugs the filters and kills the engine.

#### REDUCES GELLING POINT OF DIESEL FUEL

Will improve the low temperature operability better than other high-quality conventional treatments.

#### PROTECTION

Reduces fuel and engine friction.

Lubricates injectors and fuel pumps.

Contains no harmful alcohol.

#### Application:

Treat as a prevention, 1 bottle to 378 Litres diesel.

For very extreme low temperatures, double dose tanks - 1 bottle to 190 Litres.

Recommendation is to treat tanks all year long with RL-2 and in winter time treat for specific problem – Water condensation or freezing, Gelling, Waxing.

#### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 71203	RL199	RL ANTIGEL DIESEL FUEL TREAT	15FLOZ	443ml

## 5.27 PETROL ADDITIVES SI-1 AND SI-2

### Petrol Fuel Systems

**Detergent based' rather than 'solvent based' cleaner that will not damage the fuel system. Can clean injectors to nearly 100% efficiency in one treatment. The powerful, high temperature detergents are designed to clean injectors and intake valve deposits caused by poor quality fuel. Will not break down at high temperatures like conventional detergents.**

**SI-1 Injector & Valve detergent - is a concentrated cleaning treatment package of the most powerful high temperature detergents available.**

**SI-2 Injector & Valve detergent -same as SI-1 but packaged as a one tank application. Also contains corrosion inhibitors to prevent rust even in the presence of water.**

Designed for:

Petrol - Can be used in every tank full without harm (unlike many additives).

Safe for catalytic converters and sensors.

Recognised by BMW and equivalent to BMW original part number 88886900307.

#### INCREASES HORSEPOWER

Increases horsepower by cleaning injectors and valves.

#### IMPROVES FUEL ECONOMY

Cleans injectors and carburetor, and lubricates upper cylinders.

#### EVERYDAY IMPROVEMENTS

Can clean injectors up to 100%.

Helps eliminate hesitation and stalling.

Helps prevent knock and after-run.

Cleans emission control systems.

Removes gum & varnish.

### Application:

SI-1 One bottle 15floz to 80 litres for quick cleanup. Used regularly – one bottle 15floz in 375 litres.

SI-2 One bottle 6floz per 70 litres with each fill up to provide BMW standard of cleanliness.

### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 60103	RL170	SI-1 INJECTOR CLEAN	12FLOZ	355ml
83522 60104	RL172	SI-2 INJ/VALVE CLEANER	6FLOZ	176ml

## **5.28 POWER STEERING FLUID**

**Power steering units, some Hydraulics & Pumps.**

**Extreme temperature and wear protection for power steering units and certain hydraulic units. Helps prevent high temperature steering fade.**

**Provides 50% greater operating viscosity, 1/5 the evaporation of petroleum steering fluids, and greatly improved wear protection.**

### Designed For:

Power steering units.

Satisfies hydraulic specifications of some pumps.

For industrial heavy use, speedway use or continual rough terrain, use MTL Part No RL132 for a higher load carrying ability to reduce metal to metal hammering.

### **RESISTS FOAMING**

Resists foaming at high temperatures and a greater heat resistance which helps prevent high temperature boil-over. The excellent detergency of this fluid keeps the power steering system clean and operating properly.

### **RESISTS THERMAL BREAKDOWN**

Provides much improved wear protection. Also helps prevent difficult low-temperature steering.

## REDUCES SHUDDER

Dramatically reduces or completely eliminates shudder in some modern power steering units. Helps prevent leakage and squealing.

### Application:

Compatible with petroleum and other synthetic power steering fluids.

Further applications: Red Line Power Steering Fluid can be used where the manufacturer calls for any automatic transmission fluid such as Dexron II-D or II-E, Ford Type-F, Mercon, or M2C138-CJ such as required by Ford, AMC, Toyota, Nissan, Lexus, Infiniti, Jaguar, VW, Mercedes-Benz, BMW, SAAB, Subaru, Volvo, Porsche, Mitsubishi, Mazda, and many others. This fluid also satisfies power steering units requiring GM Part # 1050017 or 1052884 (Spec # 9985010) and Chrysler Spec # 5931, and Ford Spec # M2C33-F.

Red Line Power Steering Fluid satisfies the **hydraulic** specifications of Denison HF-O, Vickers vane pumps, and Sundstrand piston pumps.

Test	Red Line Power Steering
Flash Point	225°C
Fire Point	258°C
Vis @ -40°C	18,000cP
Vis @40°C	34.7 cSt
Vis @ 100°C	6.47 cSt
Vis @100°C after shear	6.47 cSt
Viscosity Index	143
Pour Point	-50°C
Rust (D664A/B)	Pass
Foam	0
Copper Corr	1b

### Available As

BAR CODE	CODE	ITEM	UNIT SIZE	UNIT SIZE METRIC
83522 30404	RL182-1	POWER STEERING FLUID	QRT	0.946 Ltrs

## 6.0 SIZE CONVERSIONS TO METRIC

### Conversions, American Gallons to Litres

Red Line Oil products are available in:

US 12 Fl Oz	=	equivalent to	0.355 litres
US 15 Fl Oz	=	equivalent to	0.443 litres (=1 US Pint)
US 16 Fl Oz	=	equivalent to	0.472 litres
US 1 Quart	=	equivalent to	0.946 litres (to order add -1 to part number)
US 1 Gallon	=	equivalent to	3.784 litres (to order add -4 to part number)
US 5 Gallon Pail	=	equivalent to	18.920 litres (to order add -20 to part number)
US 16 Gall. Drum	=	equivalent to	60.544 litres (to order add -64 to part number)
US 1 Fl Oz	=	equivalent to	0.0295 Litres

**US Quarts and UK Imperial Quarts are not the same amount.**

### Examples of how to order:

By Bar Code as per the product listing, or by

Alternate Part No-Volume in US Quarts = litre volume

RL108-1	=	0.946	litres
RL108-4	=	3.780	litres
RL108-20	=	18.92	litres
RL108-64	=	60.50	litres

## 7.0 Product Part Numbers

BAR CODE	CODE	ITEM	SIZE	Metric SIZE	BOX QTY
83522 70505	<b>RL300-4</b>	RL3 DIESEL ADDITIVE	1G	3.784 Ltr	<b>4</b>
83522 70303	<b>RL200</b>	RL2 DIESEL IMPROVER ADDITIVE	15FLOZ	443 ml	<b>12</b>
83522 70305	<b>RL200-4</b>	RL2 DIESEL IMPROVER ADDITIVE	1G	3.784 Ltr	<b>4</b>
83522 71203	<b>RL199</b>	RL ANTIGEL DIESEL FUEL TREAT	15FLOZ	443 ml	<b>12</b>
83522 31304	<b>RL198-1</b>	POLYCOMP COMP' SAE30	QRT	0.946 Ltr	<b>12</b>
83522 31204	<b>RL196-1</b>	POLYCOMP COMP' SAE20	QRT	0.946 Ltr	<b>12</b>
83522 31104	<b>RL194-1</b>	POLYCOMP COMP' SAE10	QRT	0.946 Ltr	<b>12</b>
83522 91142	<b>RL192</b>	SYN SUSPENSION 30WT HEAVY	16FLOZ	473 ml	<b>12</b>
83522 91132	<b>RL190</b>	SYN SUSPENSION 10WT MEDIUM	16FLOZ	473 ml	<b>12</b>
83522 91122	<b>RL188</b>	SYN SUSPENSION 5WT LIGHTWEIGHT	16FLOZ	473 ml	<b>12</b>
83522 91112	<b>RL186</b>	SYN SUSPENSION 2.5WT XTRALIGHT	16FLOZ	473 ml	<b>12</b>
83522 91102	<b>RL184</b>	SYN SUSPENSION 0WT LIKEWATER	16FLOZ	473 ml	<b>12</b>
83522 91105	<b>RL184-4</b>	SYN SUSPENSION LIKEWATER	1G	3.784 Ltr	<b>4</b>
83522 30404	<b>RL182-1</b>	POWER STEERING FLUID	QRT	0.946 Ltr	<b>12</b>
83522 80401	<b>RL180</b>	CV-2 GREASE-JAR	14OZ	400 gm	<b>4</b>
83522 80402	<b>RL178</b>	CV-2 GREASE-TUBE	14OZ	400 gm	<b>6</b>
83522 80406	<b>RL178-20</b>	CV-2 GREASE-PAIL	5G	@ 40 kg	<b>1</b>
83522 80301	<b>RL176</b>	FRICTION MODIFIER	4FLOZ	118 ml	<b>12</b>
83522 42004	<b>RL174</b>	KART CLUTCH OIL	QRT	0.946 Ltr	<b>12</b>
83522 30101	<b>RL172</b>	SI-2 INJ/VALVE CLEANER	4FLOZ	118 ml	<b>12</b>

<b>BAR CODE</b>	<b>CODE</b>	<b>ITEM</b>	<b>SIZE</b>	<b>Metric SIZE</b>	<b>BOX QTY</b>
83522 60103	<b>RL170</b>	SI-1 INJECTOR CLEAN	12FLOZ	355 ml	<b>12</b>
83522 60202	<b>RL169</b>	LEAD SUBSTITUTE	12FLOZ	355 ml	<b>12</b>
83522 70702	<b>RL168</b>	DIESEL BIOSTAT ANTI MICROBES	12FLOZ	355 ml	<b>12</b>
83522 71005	<b>RL168-4</b>	DIESEL BIOSTAT CONCENTRATE.	1G	3.784 Ltr	<b>4</b>
83522 40504	<b>RL167</b>	TWO CYCLE ALC' PREMIX	QRT	0.946 Ltr	<b>12</b>
83522 70805	<b>RL166-4</b>	85 PLUS – DIESEL FUEL ENHANCER	1G	3.784 Ltr	<b>4</b>
83522 70802	<b>RL166</b>	85 PLUS – DIESEL FUEL ENHANCER	12FLOZ	355 ml	<b>12</b>
83522 41102	<b>RL165</b>	ALCOHOL FUEL LUBE 4-CYC	12FLOZ	355 ml	<b>12</b>
83522 70102	<b>RL164</b>	DIESEL FUEL CATALYST	12FLOZ	355 ml	<b>12</b>
83522 70105	<b>RL164-4</b>	DIESEL FUEL CATALYST	1G	3.784 Ltr	<b>4</b>
83522 60302	<b>RL163</b>	WATER REMOVER & ANTIFREEZE	12FLOZ	355 ml	<b>12</b>
83522 40705	<b>RL162-4</b>	WATERCRAFT	1G	3.784 Ltr	<b>4</b>
83522 40706	<b>RL162-20</b>	WATERCRAFT	5G	18.92 Ltr	<b>1</b>
83522 40905	<b>RL160-4</b>	TWO STROKE SMOKELESS	1G	3.784 Ltr	<b>4</b>
83522 40903	<b>RL160</b>	TWO STROKE SMOKELESS	16FLOZ	473 ml	<b>12</b>
83522 40805	<b>RL158-4</b>	TWO STROKE ALLSPORT	1G	3.784 Ltr	<b>4</b>
83522 40803	<b>RL158</b>	TWO STROKE ALLSPORT	16FLOZ	473 ml	<b>4</b>
83522 41205	<b>RL157-4</b>	FOUR STROKE KART OIL	1G	3.784 Ltr	<b>4</b>
83522 41204	<b>RL157-1</b>	FOUR STROKE KART OIL	QRT	0.946 Ltr	<b>12</b>
83522 40405	<b>RL156-4</b>	TWO CYCLE KART OIL	1G	3.784 Ltr	<b>4</b>
83522 40403	<b>RL156</b>	TWO CYCLE KART OIL	16FLOZ	473 ml	<b>12</b>
83522 40605	<b>RL154-4</b>	TWO STROKE RACE OIL	1G	3.784 Ltr	<b>4</b>
83522 40603	<b>RL154</b>	TWO STROKE RACE OIL	16FLOZ	473 ml	<b>12</b>
83522 80311	<b>RL152-1/2</b>	ASSEMBLY LUBE SM TUB	½OZ	14.2 gm	<b>125</b>
83522 80312	<b>RL152</b>	ASSEMBLY LUBE TUB	4OZ	114 gm	<b>12</b>
83522 58207	<b>RL150-64</b>	HEAVY SHOCKPROOF GEAR	16G	60.544 Ltr	<b>1</b>
83522 58205	<b>RL150-4</b>	HEAVY SHOCKPROOF GEAR	1G	3.784 Ltr	<b>4</b>
83522 58206	<b>RL150-20</b>	HEAVY SHOCKPROOF GEAR	5G	18.920 Ltr	<b>1</b>
83522 58204	<b>RL150-1</b>	HEAVY SHOCKPROOF GEAR	QRT	0.946 Ltr	<b>12</b>
83522 58405	<b>RL148-4</b>	LIGHTWEIGHT SHOCKPROOF	1G	3.784 Ltr	<b>4</b>
83522 58406	<b>RL148-20</b>	LIGHTWEIGHT SHOCKPROOF	5G	18.920 Ltr	<b>1</b>
83522 58404	<b>RL148-1</b>	LIGHTWEIGHT SHOCKPROOF	QRT	0.946 Ltr	<b>12</b>
83522 58505	<b>RL146-4</b>	SUPERLIGHT SHOCKPROOF	1G	3.784 Ltr	<b>4</b>
83522 58506	<b>RL146-20</b>	SUPERLIGHT SHOCKPROOF	5G	18.920 Ltr	<b>1</b>
83522 58504	<b>RL146-1</b>	SUPERLIGHT SHOCKPROOF	QRT	0.946 Ltr	<b>12</b>
83522 57105	<b>RL144-4</b>	75W140NS GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 57106	<b>RL144-20</b>	75W140NS GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 57104	<b>RL144-1</b>	75W140NS GEAR OIL	QRT	0.946 Ltr	<b>12</b>
83522 58305	<b>RL142-4</b>	75W90NS GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 58306	<b>RL142-20</b>	75W90NS GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 58304	<b>RL142-1</b>	75W90NS GEAR OIL	QRT	0.946 Ltr	<b>12</b>
83522 58107	<b>RL138-64</b>	80W140 GEAR OIL	16G	60.544 Ltr	<b>1</b>
83522 58105	<b>RL138-4</b>	80W140 GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 58106	<b>RL138-20</b>	80W140 GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 58104	<b>RL138-1</b>	80W140 GEAR OIL	QRT	0.946 Ltr	<b>12</b>
83522 57905	<b>RL136-4</b>	75W90 GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 57906	<b>RL136-20</b>	75W90 GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 57904	<b>RL136-1</b>	75W90 GEAR OIL	QRT	0.946 Ltr	<b>12</b>
83522 50307	<b>RL134-64</b>	MT-90 GEAR OIL	16G	60.544 Ltr	<b>1</b>
83522 50305	<b>RL134-4</b>	MT-90 GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 50306	<b>RL134-20</b>	MT-90 GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 50304	<b>RL134-1</b>	MT-90 GEAR OIL	QRT	0.946 Ltr	<b>12</b>
83522 20507	<b>RL132-64</b>	MTL® GEAR OIL	16G	60.544 Ltr	<b>1</b>
83522 50205	<b>RL132-4</b>	MTL® GEAR OIL	1G	3.784 Ltr	<b>4</b>
83522 50206	<b>RL132-20</b>	MTL® GEAR OIL	5G	18.920 Ltr	<b>1</b>
83522 50204	<b>RL132-1</b>	MTL® GEAR OIL	QRT	0.946 Ltr	<b>12</b>

<b>BAR CODE</b>	<b>CODE</b>	<b>ITEM</b>	<b>SIZE</b>	<b>Metric SIZE</b>	<b>BOX QTY</b>
83522 30205	<b>RL130-4</b>	HIGH TEMP ATF AUTO TRANS	1G	3.784 Ltr	<b>4</b>
83522 30206	<b>RL130-20</b>	HIGH TEMP ATF AUTO TRANS	5G	18.920 Ltr	<b>1</b>
83522 30204	<b>RL130-1</b>	HIGH TEMP ATF AUTO TRANS	QRT	0.946 Ltr	<b>12</b>
83522 30507	<b>RL128-64</b>	D4 ATF DEXIII AUTO TRANS	16G	60.544 Ltr	<b>1</b>
83522 30505	<b>RL128-4</b>	D4 ATF DEXIII AUTO TRANS	1G	3.784 Ltr	<b>4</b>
83522 30506	<b>RL128-20</b>	D4 ATF DEXIII AUTO TRANS	5G	18.920 Ltr	<b>1</b>
83522 30504	<b>RL128-1</b>	D4 ATF DEXIII AUTO TRANS	QRT	0.946 Ltr	<b>12</b>
83522 30605	<b>RL127-4</b>	C+ ATF AUTO TRANS	1G	3.784 Ltr	<b>4</b>
83522 30604	<b>RL127-1</b>	C+ ATF AUTO TRANS	QRT	0.946 Ltr	<b>12</b>
83522 30105	<b>RL126-4</b>	SYN ATF DEXII AUTO TRANS	1G	3.784 Ltr	<b>4</b>
83522 30106	<b>RL126-20</b>	SYN ATF DEXII AUTO TRANS	5G	18.920 Ltr	<b>1</b>
83522 30104	<b>RL126-1</b>	SYN ATF DEXII AUTO TRANS	QRT	0.946 Ltr	<b>12</b>
83522 30305	<b>RL124-4</b>	RACING ATF AUTO TRANS	1G	3.784 Ltr	<b>4</b>
83522 30306	<b>RL124-20</b>	RACING ATF AUTO TRANS	5G	18.920 Ltr	<b>1</b>
83522 30304	<b>RL124-1</b>	RACING ATF AUTO TRANS	QRT	0.946 Ltr	<b>12</b>
83522 10705	<b>RL123-4</b>	SAE 70 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10605	<b>RL122-4</b>	SAE 60 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10604	<b>RL122-1</b>	SAE 60 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10505	<b>RL121-4</b>	SAE 50 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10504	<b>RL121-1</b>	SAE 50 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10405	<b>RL120-4</b>	SAE 40 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10404	<b>RL120-1</b>	SAE 40 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10305	<b>RL118-4</b>	SAE 30 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10304	<b>RL118-1</b>	SAE 30 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10205	<b>RL117-4</b>	SAE 20 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10204	<b>RL117-1</b>	SAE 20 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10105	<b>RL116-4</b>	SAE 10 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10104	<b>RL116-1</b>	SAE 10 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 10005	<b>RL115-4</b>	SAE 5 RACE ENG OIL	1G	3.784 Ltr	<b>4</b>
83522 10004	<b>RL115-1</b>	SAE 5 RACE ENG OIL	QRT	0.946 Ltr	<b>12</b>
83522 12605	<b>RL113-4</b>	20W60HD V-TWIN ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 12604	<b>RL113-1</b>	20W60HD V-TWIN ENGINE OIL		0.946 Ltr	<b>12</b>
83522 21407	<b>RL114-64</b>	15W40 DIESEL ENGINE	16G	60.544 Ltr	<b>1</b>
83522 21405	<b>RL114-4</b>	15W40 DIESEL ENGINE	1G	3.784 Ltr	<b>4</b>
83522 21408	<b>RL114-220</b>	15W40 DIESEL ENGINE	55G	208 Ltr	<b>12</b>
83522 21406	<b>RL114-20</b>	15W40 DIESEL ENGINE	5G	18.920 Ltr	<b>1</b>
83522 21404	<b>RL114-1</b>	15W40 DIESEL ENGINE	QRT	0.946 Ltr	<b>12</b>
83522 12505	<b>RL112-4</b>	20W50 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 12504	<b>RL112-1</b>	20W50 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 11505	<b>RL110-4</b>	15W50 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 11504	<b>RL110-1</b>	15W50 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 11405	<b>RL108-4</b>	10W40 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 11404	<b>RL108-1</b>	10W40 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 11305	<b>RL106-4</b>	10W30 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 11304	<b>RL106-1</b>	10W30 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 15405	<b>RL105-4</b>	5W40 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 15404	<b>RL105-1</b>	5W40 ENGINE OIL	ART	0.946 Ltr	<b>12</b>
83522 15305	<b>RL104-4</b>	5W30 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 15304	<b>RL104-1</b>	5W30 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 15205	<b>RL103-4</b>	5W40 ENGINE OIL	1G	3.784 Ltr	<b>4</b>
83522 15204	<b>RL103-1</b>	5W40 ENGINE OIL	QRT	0.946 Ltr	<b>12</b>
83522 80213	<b>RL102</b>	DIESEL WATERWETTER® (Blue)	15FLOZ	443 ml	<b>12</b>
83522 80204	<b>RL100</b>	WATERWETTER® Supercoolant (Pink)	12FLOZ	355 ml	<b>12</b>
RL5GPUMP	<b>RL5GPUMP</b>	5 GAL METAL PUMP suits Pail	EACH		<b>1</b>
RLFUNN	<b>RLFUNN</b>	AUTO TRANS FUNNEL	EACH		<b>1</b>