# Callington

# **PREMIUM FUEL ADDITIVES** FOR FUEL DISTRIBUTORS



SPECIALTY CHEMICAL MANUFACTURERS





## ROX<sup>®</sup> FUEL ADDITIVES AND ENGINE TREATMENT PRODUCTS





Protect the environment

Reduce Greenhouse emissions



Improve fuel economy



Increase performance (octane/cetane boost)



Reduce engine wear (corrosion, sludge)

The ROX<sup>®</sup> Range of Fuel Additives brings all of Callington's extensive expertise together to create chemical solutions that meet the demanding requirements of fuel distributors.

The range has been formulated with the experience gained from over 40 years in the Petroleum Industry. Our range of chemicals have been specifically formulated to treat and prevent contaminants, improve stability, improve fuel quality, improve engine performance, reduce consumption and reduce emissions harmful to our environment.

Callington's long history in producing solutions for the aviation market enables us to provide fuel distributors with the most advanced and efficient fuel additives formulations at the highest standards.



- ROX<sup>®</sup> 9300C Cetane Diesel Fuel Additive
- ROX<sup>®</sup> 9300 Diesel Fuel Additive Detergent
- ROX<sup>®</sup> 9300 LFC Diesel Fuel Low Foam High Flow Improver
- ROX<sup>®</sup> 4300 Fuel Biocide
- ROX<sup>®</sup> 7501 Diesel Stabiliser
- ROX<sup>®</sup> Diesel Anti-Freeze
- ROX<sup>®</sup> 8300 Premium Octane Boost
- ROX<sup>®</sup> 2104 Gasoline Performance Additive
- ROX<sup>®</sup> Pro DPF Cleaner







#### **OUR ROX® 9300 RANGE**

Product	Item Code	Description
Rox <sup>®</sup> 9300 Diesel Fuel Additive	8260	Helps to reduce fuel consumption and provides a complete diesel treatment. It will turn regular diesel into a premium fuel.
Rox <sup>®</sup> 9300C Cetane Diesel Fuel Additive	8759	With added Cetane improvers. Helps to reduce fuel consumption and provides a complete diesel treatment . It will turn regular diesel into a premium fuel.
Rox <sup>®</sup> 9300C Concentrate Cetane Diesel Fuel Additive	8762	With added Cetane improvers, in a concentrated formula. Provides a complete diesel treatment and is specially designed to give enhanced combustion.
Rox® 9300 LFC Low Foam Concentrate Cetane Diesel Fuel Additive	8752	Will allow for high flow fillings. Includes added Cetane improvers. Provides a complete diesel treatment and is specially designed to give enhanced combustion.



Product	Item Code	Packaging
ROX <sup>®</sup> 9300C Cetane Diesel Fuel Additive	8759/51 8759/64	20L 2001
DieserruerAdditive	8759/1000	1000L

#### **FEATURES & BENEFITS**

**ROX® 9300C DIESEL FUEL ADDITIVE WITH CETANE IMPROVERS** is a multi-functional ashless organic fuel additive. It provides a complete diesel treatment and is specially designed to give enhanced combustion through the addition of Cetane improvers. ROX® 9300C will turn your regular diesel into a premium fuel.

- Increases Cetane rating of fuel
- Delivers up to 5.9% saving in Diesel consumption and up to 18.5% saving in AdBlue consumption
- Reduces engine wear
- APPLICATION

- Reduces particulate matter and NOx emissions
- Cleans combustion chamber and injector deposits
- Enhanced fuel stability
- Reduces noise, vibration and corrosion

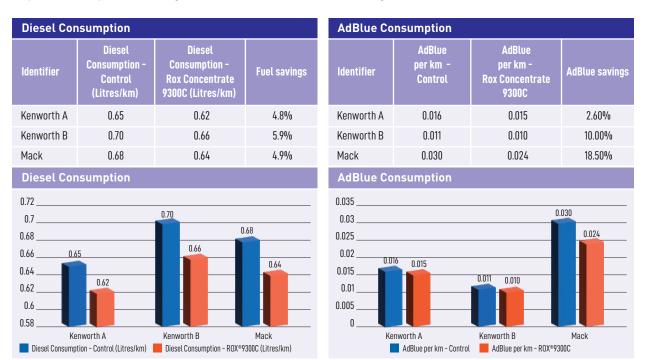
The recommended treat rate is 1:500 for the initial treatment and 1:1000 to 1:2000 for subsequent treatments.



## ROX® 9300C DIESEL FUEL ADDITIVE WITH CETANE IMPROVER EFFECTIVENESS TRIALS

**Scope:** The scope of the trial was to measure the changes in fuel economy (expressed in fuel consumption) and AdBlue consumption in a fleet of three trucks over the course of one month and a distance of just over 200,000 km.

**Results:** The results obtained at the end of the trial were then compared to existing data to provide a quantified figure for fuel and AdBlue saving. The results are summarised below.







Product	Item Code	Packaging
ROX <sup>®</sup> 9300 Diesel	8260/64	200L
Fuel Additive	8260/1000	1000L

**ROX® 9300 DIESEL FUEL ADDITIVE** is a multi-functional diesel fuel maintenance product. It is specially designed to give an overall improvement on most aspects of fuel efficiency.

#### **FEATURES & BENEFITS**

- Injector cleanliness & powerful biocide
- Improved lubricity & fuel economy
- Improved exhaust emission
- Enhances fuel stability & demulsibility

#### **APPLICATION**

The recommended treat rate is 1:500 for the initial first-time treatment and 1:1000 to 1:2000 for subsequent treatments.

- Add 1 part of Diesel Fuel Additive to 500 parts of Diesel for the first treatment. Mix well.
- For subsequent treatment add 1 part to 1000 parts of Diesel.





Product	Item Code	Packaging
ROX <sup>®</sup> 9300C LFC Low Foam Concentrate Cetane Diesel Fuel Additive	8752/51 8752/64	20L 200L

**ROX® 9300 LFC** is a multi functional organic fuel additive that, as well as enhancing combustion through the addition of Cetane improvers, will allow for high flow filling because of its anti-foaming properties.

#### **FEATURES & BENEFITS**

- Anti-foam formula allows for high flow filling
- Increases Cetane number
- Provides more complete and cleaner combustion
- Cleans injectors
- Improved fuel atomisation
- Cleans intake & outlet valves
- Reduced noise reduces fuel consumption
- Enhanced fuel stability in storage Inhibits corrosion & rust
- Biocidal action sludge dispersion

#### **APPLICATION**

The recommended treat rate is 1:2000 to 1:4000





Product	Item Code	Packaging
ROX® 4300 Diesel Fuel Biocide	8275/51 8275/64 8275/1000	20L 200L 1000L

**ROX® 4300 DIESEL FUEL BIOCIDE** is a potent biocide for killing and for preventing regrowth of most types of organisms that grow in fuels. Similarly, Rox® 4300 acts as a fuel tank corrosion inhibitor and fuel lubricant.

Rox<sup>®</sup> 4300 is effective against most types of organisms found in fuel; it is particularly effective against Cladosporium resinae (a hydrocarbon utilizing fungus); as well as against bacteria, yeasts, and other fungi.

Being totally organic, Rox<sup>®</sup> 4300 leaves no ash on combustion.

#### **FEATURES & BENEFITS**

- 100% organic, leaves no ash on combustion
- Also acts as a fuel tank corrosion inhibitor & fuel lubricant
- Kills a wide range of bacteria, fungi and mould

#### APPLICATION

The recommended treat rate is 1:5000.





Product	Item Code	Packaging
ROX <sup>®</sup> 7501 Diesel	8274/64	200L
Stabiliser	8274/1000	1000L

**ROX® 7501 DIESEL STABILISER** is a formulated blend of diesel stabilising actives that increases the shelf life of diesel in storage.

It utilises antioxidant actives approved under the US Military MIL-DTL-83133F standard and provides increases in performance and fuel economy in addition to its primary function as a fuel preservation additive.

In its capacity as a fuel stabiliser, it prevents and mitigates the main factors involved in the breakdown of diesel fuel, including moisture, bacterial growth, and oxidation.

#### **FEATURES & BENEFITS**

- Extends the shelf life of diesel fuel for up to 12 months
- Increases the resilience of diesel fuel to oxidation
- Prevents bacterial contamination in diesel fuel
- Manages water contamination in diesel fuel
- Prevents corrosion in fuel systems

#### **APPLICATION**

The recommended treat rate is 1:1000.



Product	Item Code	Packaging
ROX® Diesel Anti-Freeze	8250/51 8250/64 8250/1000	20L 200L 1000L

#### **ROX® DIESEL ANTI-FREEZE**

#### ISSUE

When diesel fuels are operating in temperatures below their Cloud Point (CP) paraffinic wax crystals form within the fuel. These wax crystals will continue to form and when temperature drops below the Cold Filter Plugging Point (CFPP) the fuel will no longer pass through the filter.

#### SOLUTION

**ROX® Diesel Anti-Freeze** modifies the size and shape of the wax crystals which extends the CFPP and PP temperature ranges. This will delay fuel line and filter blockages and in doing so, keep engines running.

TEST REPORTS	CLOUD POINT	CFPP	POUR POINT
	(ASTM D2500)	(IP309)	(ASTM D97)
Winter Diesel (Untreated)	-1ºC	-2ºC	-9ºC
Winter Diesel + Rox 1:1000	-1ºC	-4ºC	<-27ºC
Winter Diesel + Rox 1:500	-1ºC	-8ºC	<-27ºC

#### **FEATURES & BENEFITS**

- Cold flow improver significantly lowers pour point and extends the temperature range over which a vehicle can operate (Cold Filter Plugging Point)
- Developed in conjunction with the Australian Oil Refinery and used for over 30 years throughout the cold regions of Australia.
- Suitable for all diesel fuelled road, rail and marine transports, heavy vehicles, mining, rural and agriculture equipment.
- Its long life makes it the perfect partner for generator sets, pumps, static equipment and fuel tanks situated in cold remote and isolated locations.

#### **APPLICATION**

It is important to add the Rox Diesel Antifreeze to the fuel when the temperature of the fuel is above its cloud point.

A dosage rate of 1 litre Rox Diesel Antifreeze to 500 litres of MGO or diesel fuel is required for the coldest climates. A dosage of up to 1:1000 is acceptable in milder temperature ranges.





Product	Item Code	Packaging
ROX <sup>®</sup> 8300 Premium	8273/64	200L
Octane Boost	8273/1000	1000L

**ROX® 8300 OCTANE BOOSTER** is a formulated blend of octane boosting compounds designed to raise the octane rating of petrol. In increasing the octane rating of petrol, a number of improvements to engine operation and fuel efficiency are achieved.

#### **FEATURES & BENEFITS**

- Can raise the Research Octane Number (RON) of petrol from 91 to 95, or from 95 to 98
- Functional at low dose rates
- Increases engine power
- Reduces engine knocking
- Increases fuel economy
- Reduces greenhouse gas emission intensity in vehicles

#### **APPLICATION**

To increase the RON of base fuel from 91 to 95, dose 1 litre of ROX<sup>®</sup> 8300 Octane Booster for every 175 litres of petrol.

To increase the RON of base fuel from 95 to 98, dose 1 litre of ROX<sup>®</sup> 8300 Octane Booster for every 175 litres of petrol.

Do not exceed a dose rate of 1 litre for every 175 litres of petrol.





Product	Item Code	Packaging
ROX <sup>®</sup> Pro DPF	8295/42	5L
Cleaner	8295/51	20L

**ROX® PRO DPF CLEANER** is a catalytic diesel fuel additive designed to regenerate Diesel Particulate Filters (DPFs) that have become obstructed by carbon deposits. It uses a combination of metal catalysts to restore the capacity of diesel particulate filters to reduce the costs of maintenance and replacement of the diesel particulate filter over the engine's lifetime.

#### **FEATURES & BENEFITS**

- Reduces maintenance cost of Diesel Particulate Filters in the form of longer lifetime and reduced cleaning costs
- Reduces particulate emissions
- Facilitates the combustion of soot that has obstructed a diesel particulate filter
- Can allow an engine to recover from "limp mode"

#### **APPLICATION**

ROX<sup>®</sup> Pro DPF Cleaner is suitable for all DPF's that have severe clogging problems. Do not use in any other machine. Do not add to diesel fuel tank.



#### PETROL TREATMENTS



Product	Item Code	Packaging
ROX <sup>®</sup> 2104 Gasoline	8269/51	20L
Performance Additive	8269/64	200L

**ROX® 2104 GASOLINE PERFORMANCE ADDITIVE** is an ashless, organic polyetheramine detergent to control combustion chamber deposits with exceptional control of fuel injector, PFI, DIG and intake valve deposits.

#### **FEATURES & BENEFITS**

- Keeps carburettor, fuel injectors and intake valves clean
- Intake valve deposits clean up
- Combustion chamber deposits clean up
- Lowers exhaust emissions
- Minimum combustion deposit
- Improved overall engine performance
- Improved fuel economy

#### **APPLICATION**

Callington recommends a dose rate of 1:1000 for top tier combustion chamber clean up performance.

The minimum dosage is 1:10000. At the low dose rate of 100-200ppm (1:10000 – 1:5000) injectors will be cleaned up and kept clean. At higher dose rates 500-1000ppm (1:2000 – 1:1000) all benefits will be achieved.









#### ALSO AVAILABLE

Product	Item Code	Packaging
ROX <sup>®</sup> Care Degreaser	8240/42 8240/51	5L 20L
<ul> <li>Quick break action provide washdown waste.</li> </ul>	es easy remov	al of
ROX <sup>®</sup> 2104 Petrol Anti- gumming agent	8269/69 8269/1000	200L 1000L
<ul> <li>To control deposits on fue and combustion chambers</li> </ul>	l injectors, int s.	ake valves
ROX <sup>®</sup> 1600 Concentrate Water in Fuel Emulsifier & Treatment	8262/51 8262/64	20L 200L
• The fuel treatment will represent the bacteria and fungi growth		/ent
ROX <sup>®</sup> Care MC 2600	8249/51	20L
Solvent based Tank Cleaner	8249/64	200L
	8249/64 ble solvent-bas	sed
<ul> <li>Cleaner</li> <li>A low toxicity, biodegradate emulsifier for the cleaning</li> </ul>	8249/64 ble solvent-bas	sed
Cleaner • A low toxicity, biodegradak emulsifier for the cleaning tank residues. ROX® 2900 ULSMGO	8249/64 ole solvent-bas of MARPOL / 8283/51 8283/64	sed Annex II 20L 200L
Cleaner <ul> <li>A low toxicity, biodegradak emulsifier for the cleaning tank residues.</li> </ul> ROX® 2900 ULSMG0 Lubricity Improver <ul> <li>Specifically formulated to</li> </ul>	8249/64 ole solvent-bas of MARPOL / 8283/51 8283/64	sed Annex II 20L 200L





Product	Item Code	Packaging
ROX <sup>®</sup> 5900 Asphaltene Dispersant	8764/51 8764/64	20L 200L
• A multifunctional additive providing powerful sludge dispersant, fuel blend stabilization, anti-corrosive, lubricity and biocidal properties.		
ROX® 7500 Biodiesel Antioxidant	8251/51 8251/64	20L 200L
• Formulated to improve the oxidative stability of biodiesels. Fuels that do not have sufficient oxidative stability produce free radicals which result in formation of colour and sediment deposits.		
ROX® 8700 Organic Cetane Improver	8190/51 8190/64	20L 200L
<ul> <li>Cetane improver increases the cetane rating of diesel fuel to any statutory or desired levels.</li> </ul>		
ROX® 9500 Complete HFO Treatment	8278/51 8278/64	20L 200L
<ul> <li>Develops greater diesel engine and boiler combustion efficiency, reducing smoke and soot and reducing fuel consumption.</li> </ul>		

### **Premium Fuel Additives** for Fuel Distributors

### Callington

CALLINGTON OPERATES GLOBALLY ACROSS SIX CONTINENTS AND OUR SPECIALTY PRODUCTS AND SERVICES ARE PROVIDED TO CUSTOMERS IN OVER 150+ COUNTRIES.

















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