# Perkins Extended Life Inhibitor

# The difference is in the detail

## **Corrosion inhibitor concentrate** Long-lasting cooling system protection for warm climates

Perkins ELI (Extended Life Inhibitor) is a long-lasting corrosion protection for marine and industrial engines working in environments that do not experience freezing temperatures.

Perkins ELI uses an active protection technology, similar to Perkins<sup>®</sup> Extended Life Coolant (ELC), that avoids the problems experienced with conventional coolants and supplemental coolant additives (SCA) mixed with water. Perkins ELI works by sending its organic additives only to areas susceptible to corrosion. This active protection technology delivers improved corrosion protection efficiency with a longer life change interval, which results in fewer coolant changes and reduces environmental disposal impact.



Glycol free, concentrated engine coolant inhibitor

- Mix with water 7.5% concentrate, 92.5% water
- Longer life over conventional water-based coolant inhibitors
- Recommended for initial fill and top-up
- Provides outstanding corrosion protection
- Does not provide additional freeze or boil protection when mixed with water
- Silicate free. Contains nitrites for enhanced liner cavitation corrosion protection
- Uses inhibitors that provide enhanced protection against pitting and corrosion for aluminium, brass, copper, iron, steel plus other metals
- Ensure high-quality water if diluting. Distilled or deionised water is preferred

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THE HEART OF EVERY GREAT MACHINE

#### Benefits - lower owning and operating costs

- Recommended change interval is three times longer than conventional coolants or commercial supplemental coolant additives (SCAs) mixed with water
- Reduced maintenance costs as a result of less frequent coolant health checks, SCA inhibitor replacement, and drains/flushes
- Fewer repairs needed due to improved corrosion protection

#### Protection of aluminium components

Aluminium is commonly used in modern diesel engine components and cooling systems. When SCA mixed with water is used as a coolant, significant corrosion of aluminium components can result. The chemical technology in Perkins ELI has been shown to provide significantly better aluminium protection.

#### **Recommended change interval**

Perkins engines 6,000 hours

#### **Applications**

Perkins ELI mixed with water of acceptable quality has been shown to provide enhanced corrosion protection in cooling systems not requiring freeze protection. Perkins ELI may also be used in engines produced by other manufacturers that allow the use of water-based coolants (follow the OEM directions). Perkins ELI may also be used to boost corrosion protection inhibitor levels in Perkins ELC without increasing glycol concentration.

#### Maintenance recommendations

Perkins ELI concentration should be routinely checked with a refractometer or through the use of coolant analysis. Maintain approximately 7.5% concentration. Always stay between 5 and 10% concentration.

#### **Replacing ELI**

At the time the coolant is drained from the cooling system, only clean or flush with clean water. Cleaning agents are not generally required when changing Perkins ELI for a new batch.

#### **Changing to Perkins ELI**

If the engine has been using conventional coolants then a commercial cleaner should be used to clean the cooling system. After the cleaner solution has been drained, it is very important that a water flush be used to remove all traces of the cleaning agent. If the cooling system has been using Perkins ELC, flush the system with clean water only and refill with Perkins ELI and water.

### Fluid sample testing services for early problem detection

Protect your investment with Perkins fluid sampling, the detection and diagnostic tool for your equipment. Refer to the Perkins Fluids Operation and Maintenance Manual for the recommended intervals of coolant analysis.

#### Health and safety

For information on proper use for health, safety, and environment, please refer to the Material Safety Data Sheet (MSDS). For a copy of the MSDS, contact your local distributor or visit **www.perkins.com/msds** 

#### Typical characteristics<sup>1</sup>

ASTM Performance Requirements <sup>2</sup>	ASTM D1384, D2570, D4340
Colour	Red
Recommended Dilution Level <sup>3</sup>	7.5%
Freeze protection	ELI does not provide freeze protection
pH (7.5% solution)	8.5
Nitrite (7.5% solution)	500 ppm
Molybdate (7.5% solution)	530 ppm
Boiling protection at sea level	100°C, 121°C with 1 bar (15 psi) pressure cap
Part number	1L – T402623

- 1 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.
- 2 Exceeds performance requirements for automotive and heavy-duty coolants as specified by ASTM D3306, D4985, D6210.
- 3 ELI concentration can be determined using a Brix refractometer

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