

## Piston Power Radiator Power EL

Extended Life Antifreeze and Summer Coolant

Radiator Power EL –mixed with the appropriate amount of water – is used as a cooling and heat transferring fluid in combustion engines. Excessive heat is transferred via the fluid to the radiator where the mixture is cooled by means of airflow. Radiator Power EL is an ethylene glycol-based fluid that provides maintenance-free protection against freezing and boiling but also against corrosion. Extended coolant life, often for the whole life of the engine of vehicle, is obtained through the use of virtually non-depleting corrosion inhibitors.

### Applications

- Specially formulated to protect car, truck, and bus engines of both ferrous and aluminium construction against corrosion and frost damage.
- Also suitable for use in industrial internal combustion engines where an antifreeze/coolant is required to provide protection against freezing, boil over and corrosion.

### Performance Features

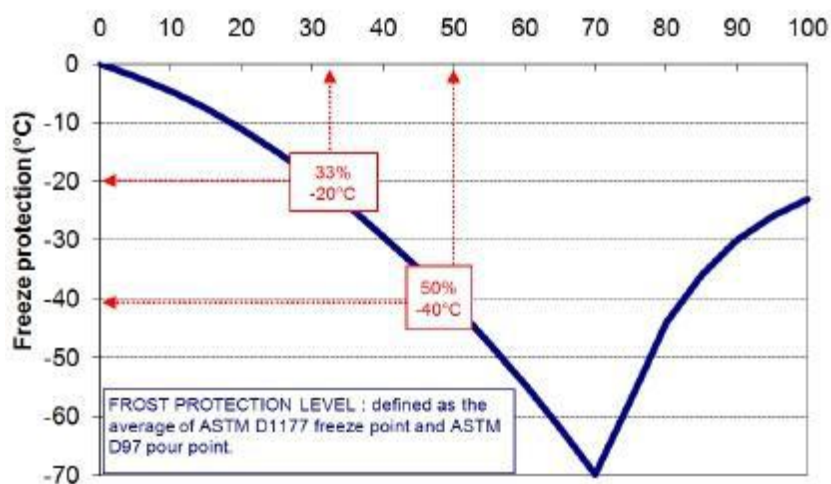
- **Extended life** by synergistic combination.
- **Improved heat transfer** leaves more flexibility to engine design.
- **Reduces repairs** to thermostat, radiator, and water pump.
- **Reliability** depletion free and stable inhibitor.
- **Improved hard water stability** absence of silicates and phosphates.
- **Save time and money** maintenance free coolant.
- **Suitable for mixed fleets** 1 coolant for automotive and heavy-duty application.
- **Environmentally friendly** by using carboxylic additives.

- **Based on patented silicate-free aliphatic additive technology.** Radiator Power EL provides long-life corrosion protection for all engine metals, including aluminium and ferrous alloys. During extensive fleet testing, the synergistic combination of mono and di-carboxylates present in the coolant, has proven to provide protection for at least 650 000kms (ca 8 000 hours) in truck & bus application or 250 000kms (ca 2 000 hours) for passenger cars or 32 000 hours (or 6 years) for stationary engines. It is recommended to change the coolant every 5 years or at above mileages or operating times, whichever comes first.
- **Dyed strawberry red** for identification in mixtures.

## Dosage

- Radiator Power EL provides long-life frost and corrosion protection.
- To ensure good corrosion protection it is recommended to use at least 33 vol % of Radiator Power EL in the coolant solution. This provides frost protection to  $-20^{\circ}\text{C}$ .
- Mixtures with more than 70 vol % Radiator Power EL in water are not recommended. The maximum frost protection (about  $-69^{\circ}\text{C}$ ) is obtained at 60 vol % Radiator Power EL.

### Mixtures of Radiator Power EL in-Water Concentration (vol. %)



## **Compatibility and Mixability**

Radiator Power EL is compatible with most other coolants based on ethylene glycol. Exclusive use of Radiator Power EL is, however recommended for optimum corrosion protection and sludge control.

Also use of soft water is preferred for dilution though lab testing has shown that acceptable corrosion results are still obtained with water of 20° d, containing up to 500 ppm chlorides or 500 ppm sulphates.

## **Performance Specifications**

Radiator Power EL meets the requirements of the following specifications

- Ford specification WSS-M97B44-4
- Mercedes-Benz specification 325.3
- General Motors specification GM 6277M
- MAN specification 325 type SNF
- Volkswagen specification TL 774F

Radiator Power EL is suitable for use as antifreeze/coolant in any combustion engine. See the OEM's manual on recommended coolant type.

## **Health and Safety**

- Harmful if swallowed. Keep out of reach of children. If swallowed, seek medical advice immediately. Avoid contact with skin.

## Typical Characteristics

Property	Method	Value
Ethylene Glycol		93% w/w glycol
Other Glycols		0.5% max
Inhibitor Content		5% w/w
Water Content	ASTM D1123	5% w/w max
Ash Content	ASTM D1119	1.1% w/w
Nitrile, amine, phosphate, borate, silicate		Nil
Colour		Strawberry red
Specific gravity, 15°C	ASTM D5931	1.116
Specific gravity, 20°C	ASTM D5931	1.113
Equilibrium boiling point	ASTM D1120	180°C
Reserve alkalinity (pH 5.5)	ASTM D1121	6.2
pH, 20°C	ASTM D1287	8.6
Refractive Index, 20°C	ASTM D1218	1.430
<b>Freezing Protection</b>  <b>50% dilution</b>  <b>40% dilution</b>  <b>33% dilution</b>		-40°C typical  -27°C typical  -20°C typical

<b><u>Package Size</u></b>	<b><u>Product Code</u></b>
210L	99-RORPEL004
20L	99-RORPEL003
5L	99-RORPEL002
1L	99-RORPEL001