

# TEC-KOOL®

## ELITE



**TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze/Coolant** is a heavy-duty extended life antifreeze/coolant and contains a proprietary poly-organic/multi-organic acid technology inhibitor system that does not contain any phosphate, silicate, borate, nitrate or nitrite. **TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze/Coolant** meets the performance requirements of ASTM D6210 without nitrite or nitrite/molybdate combination. It does not require a supplemental coolant additive (SCA) for heavy-duty fleet maintenance programs, but still provides wet sleeve cylinder liner cavitation protection due to its unique formulation.

A major advantage of this type of antifreeze is that it provides total cooling system protection for 600,000 on-road miles without the use of additive-containing coolant filters or supplemental coolant additives (SCAs). The addition of an extender at 300,000 miles is the only maintenance required, although, it is recommended that a sample of the coolant be inspected quarterly to detect any problems, such as; significant color change, pH change, phase separation, precipitation, cloudiness, or obvious contamination. This inspection should be in addition to the parameters that are normally checked in a routine or scheduled maintenance program.

**TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze/Coolant's** all-organic/poly-organic acid formulation has several other advantages, it is; compatible with all types of coolant technologies including conventional inorganic acid salt formulations, straight organic acid (OAT) formulations, hybrid organic acid formulations (HOAT), nitrated HOAT formulations (NOAT) and other poly-organic acid formulations. Additionally, **TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze/Coolant** has a low reactivity which makes it less sensitive to contaminants such as motor oil, hard water compounds and other coolants. In fact, it can be mixed with other coolants in any proportion without adverse effects on corrosion protection. **TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze/Coolant** is suitable for passenger cars, vans, SUVs, light trucks, heavy-duty fleet vehicles and many off-road applications such as stationary engine cooling systems. It will provide superior corrosion protection for all cooling system metals, including aluminum, steel, cast iron, copper, brass and solder.

- Protects up to 6 years or 600,000 miles
- Nitrite-Free poly-organic acid technology inhibitor system
- Diesel Ready Heavy-Duty

### Meets or exceeds the following performance requirements and industry specifications:

- ASTM D3306
- ASTM D4985
- ASTM D6210
- PACCAR®
- Cummins® CES 14603
- TMC RP329B, RP330A
- John Deere® H24A1, H24C1
- Caterpillar® EC-1
- Navistar® MPAPS B-44
- Detroit Diesel® 7SE298
- Navistar® MPAPS B-1 TYPE IIIA

|              | Product Number | UPC Code     | Pack            |
|--------------|----------------|--------------|-----------------|
| Concentrate  | 1031012560CONC | 859862007418 | 6/1 Gallon      |
|              | 1031021560CONC | 859862007432 | Drum            |
|              | 103102560CONC  | 859862007449 | 275 Gallon Tote |
|              | 103102560CONC  | 859862007456 | 330 Gallon Tote |
| 50/50 Premix | 10310125650/50 | 859862007401 | 6/1 Gallon      |
|              | 10310215650/50 | 859862007425 | Drum            |
|              | 10310205650/50 | 859862007463 | 275 Gallon Tote |
|              | 10310205650/50 | 859862007470 | 330 Gallon Tote |

## TEC-KOOL Elite Red Nitrite-Free Heavy-Duty ELC Concentrate Antifreeze

| Physical Properties             |        |                |
|---------------------------------|--------|----------------|
| Antifreeze Glycols              | Mass % | 95.0 min.      |
| Water & Corrosion Inhibitors    | Mass % | 5.0 min.       |
| Flash Point                     | °F     | 250° F         |
| Weight per gallon at 60°F -16°C | lbs.   | 9.17-9.37 min. |
| Silicates                       | Mass % | Nil            |

| % Antifreeze                                                                   | Freezing Point |          | Boiling Point* |          |
|--------------------------------------------------------------------------------|----------------|----------|----------------|----------|
|                                                                                | °F             | °C       | °F             | °C       |
| 40%                                                                            | -9 max.        | -22 max. | 220 min.       | 104 min. |
| 50%                                                                            | -34 max.       | -36 max. | 226 min.       | 107 min. |
| 70%                                                                            | -84 max.       | -64 max. | 240 min.       | 115 min. |
| *Boiling point shown at atmospheric pressure. Add 40°F for 15psi radiator cap. |                |          |                |          |

| Characteristics                    | Specification                          | Company Typical | ASTM Method |
|------------------------------------|----------------------------------------|-----------------|-------------|
| Chloride                           | 25 ppm, max.                           | 2               | D3634       |
| Specific gravity 60/60°F           | 1.110-1.145                            | 1.120           | D1122       |
| Boiling Point Undiluted            | 325°F/162°C min.                       | 328             | D1120       |
| Boiling Point, 50% V/V             | 226°F / 107°C min.                     | 230             | D1120       |
| Freezing Point, 50% V/V            | -34°F / -36°C min.                     | -34             | D1177       |
| Effect on engine or vehicle finish | No effect                              | Pass            | --          |
| Ash content, mass%                 | 2.5 max.                               | 2.0             | D1119       |
| pH, 50% V/V                        | 8.0-9.0                                | 8.7             | D1287       |
| Reserve alkalinity*                | None specified                         | 8               | D1121       |
| Water mass %                       | None specified                         | 2.3 max.        | D1123       |
| Color                              | Distinctive                            | Red             | --          |
| Effect on nonmetals                | No adverse effect                      | Pass            | --          |
| Storage stability                  | None specified                         | >1 year         | --          |
| Foaming                            | 150 ml rise max.<br>5 sec. break, max. | Pass            | D1881       |

\* Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**NOTE:** All laws/regulations should be observed when disposing of Antifreeze/Coolant. Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/state/national/international regulations.

