



Product Data Sheet

PolarZone™ Universal Antifreeze/Coolant Gas and Light Duty Diesel Engines

Description

PolarZone™ Universal Antifreeze/Coolant is a superior quality ethylene glycol (EG) based engine coolant with a low silicate corrosion inhibitor package and is intended for use in automobile and light duty applications. This product protects coolant system metals (including heat-rejecting aluminum) against pitting caused by cavitation and corrosion.

PolarZone™ Universal Antifreeze/Coolant is recommended for use in older model domestic and foreign cars and light duty trucks. This product can provide up to 80,000 kms or two years of service life when installed as initial fill or after a complete flush and cleaning of a cooling system in reasonable condition and as indicated by the vehicle manufacturers manual. It is compatible with supplemental coolant additives (SCA) and coolant filters and thus can be used in heavy duty diesel coolant systems when pre-charged with SCA.

Advantages

- Protects against corrosion of brass, copper, solder, steel, cast iron, and aluminum components
- Low silicates and phosphate-free
- Heavy duty diesel engine compatible with addition of SCAs

Applications

- Gas and light duty diesel engines

Meets or exceed the following specification standards and performance requirements:

| ASTM D-3306, D-4985 | | |
|--|---|--|
| <ul style="list-style-type: none"> • Case Corp MS1710 • Caterpillar • Cummins 90T8-4 • Detroit Diesel 7SE298 • EMD M.I. 1748E | <ul style="list-style-type: none"> • Ford New Holland 9-86 • Freightliner 48-22880 • GM 6038M, 1825M, 1899M • John Deere 8650-5 • MACK | <ul style="list-style-type: none"> • Navistar • PACCAR • Thermo-King • TMC RP 302B • Volvo GM • Waukesha 4-1974D |

Typical Characteristics – Nemco PolarZone™ Global ELC Antifreeze/Coolant

| Properties | Method | Performance | |
|----------------------------|------------|-----------------------|-----------------|
| | | Universal concentrate | Universal 50:50 |
| Colour | Appearance | Green | Green |
| Specific gravity, 20°C (F) | Internal | 1.112 | 1.07 |
| pH | D1287 | 9.5 – 11* | 9.5 – 11 |
| Continued on page 2 | | | |



Product Data Sheet

| Properties | Method | Performance | |
|----------------------|------------|-----------------------|-----------------|
| | | Universal concentrate | Universal 50:50 |
| Freeze point, °C(F) | D3321 | -15(5)* | -37(-34.6) |
| Boiling point, °C(F) | D3321 | 163(325)* | 107(225)* |
| Nitrite, ppm | D5827 | 1300 - 1700* | 800 – 1000* |
| Carboxylate, % | Test strip | n/a | n/a |
| Reserve Alkalinity | D1121 | 5.5* | 3* |
| Glycol Content % | D3321 | ≥95* | ≥49* |

These characteristics are typical of current production, variations in these characteristics may occur. Items with ‘*’ display our product test results from a CALA accredited lab in conforming to ISO/IEC 17025.

Availability and product codes

| Pack size | 12x1L case | 4x4L case | 20L pail | 205L drum | Bulk |
|----------------------------|------------------------------------|------------|------------|------------|------------|
| Universal concentrate | AEAFZ0004 | AEAFZ0007 | AEAFZ0045 | AEAFZ0069 | AEAFZ0117 |
| Universal 50:50 prediluted | - | AEAFZ0006 | AEAFZ0044* | AEAFZ0068 | AEAFZ0116* |
| Universal 60:40 prediluted | - | AEAFZ0005* | - | AEAFZ0067* | AEAFZ0115* |
| Availability | Year round / Speak to a Sales Rep* | | | | |

Use and Storage

Coolant concentrate should be diluted prior to use. For best performance it is recommended coolant concentrate be premixed with distilled, deionized, or demineralized water. Dilution should not fall below a 40:60 (coolant/water) ratio at initial fill. Always check your vehicle manufacturer's specifications for coolant use. Coolant typically has a shelf life of 5 to 8 years under ideal storage conditions; keep packages closed while not in use, store in a cool and dry area.

Health, Safety, & Environment

GHS compliant Safety Data Sheets are available at nemco.ca under the Safety Data Sheets. For SDS in French, please contact info@nemco.ca. This material is WHMIS 2015 classified. The SDS contains valuable information critical to the safe handling and proper use of the product. Always take used glycol to an authorized collection point. Avoid discharge into drains, soil, or water. As with any chemical, keep out of reach of children and animals.

Quality

Nemco works with respected industry suppliers for coolant additives and our ethylene glycol meets ASTM E1177. Nemco Resources Limited manufacturing facility in Winnipeg, Manitoba is proud to be certified to ISO9001. For questions regarding quality, please contact your local sales representative.