# PGDC

**PROPYLENE GLYCOL–BASED DIRECT–TO–CHIP COOLANT**

| PRODUCT | #222 (CONC.) | #212 (PREMIX – 25%) |
|---|---|---|

## Overview

PGDC is designed for specific heat transfer applications, including data centers utilizing direct-to-chip cooling systems, and aluminum closed loops system requiring a lower pH coolant. The inhibitor chemistry uses organic acid technology (OAT) without objectionable components like phosphate and heavy metals. It is an environmentally friendly alternative to traditional Ethylene-glycol based heat transfer fluids. The product offers protection of aluminum, brass, copper, stainless and carbon steel.

As an all-organic formulation, PGDC does not contain any conventional inorganic salts (free of nitrite, nitrate, silicate, phosphate and borate), amines or 2-ethylhexanoic acid. The technology minimizes deposit formation, protects a wide variety of metals, and has high compatibility with non-metal components (hoses, seals, and gaskets). The coolant's performance is further enhanced with anti-scalant and anti-fouling additives.

Crystal Cleans PGDC is long-lasting and has great temperature stability, covering a wide range from 14°F (-10°C) to 195°F (90°C). Through laboratory testing, and if required, a concentrated booster is available for restoring the inhibitor content to keep the coolant in proper balance.

| Characteristic | Typical Value |
|---|---|
| pH, at 68°F (20°C) | 8.67 |
| Chloride (ppm) | 25 maximum |
| Specific gravity, at 68°F (20°C) | 1.026 |
| Freezing Point, (°F/°C) | 14°F/-10°C |
| Specific Heat Capacity (kJ/kg°C)) | 3.96 |
| Electrical Conductivity (µS/cm) at 68°F (20°C) | 3260 |
| Reserve alkalinity (mL 0.1N HCl) | 1.5 minimum |
| Propylene glycol (% by volume) | 25 |

| Refractive Index (20°C) | Propylene Glycol (%BV) | Freezing Point (°F/°C) |
|---|---|---|
| 1.3634 | 24.5 | 14.7/-9.6 |
| 1.3646 | 25.5 | 13.7/-10.2 |
| 1.3658 | 26.5 | 12.6/-10.8 |