

PROCOOL COMMERCIAL 5050

PRODUCT DATA SHEET

Procool Commercial 5050 Engine Coolant is Green coloured, superior, fully formulated Hybrid technology engine coolant. This Hybrid technology coolant has the advantage of being more robust than both conventional and organic acid technology (OAT) engine coolants. This low silicate, phosphate and amine free product is recommended for use in automotive (aluminium compatible), light duty and heavy-duty diesel applications namely on-road truck, off-road, farm and marine. It provides excellent high temperature aluminium protection.

It does not require an initial charge of supplemental coolant additives (SCAs) upon initial fill in heavy duty diesel applications as the product is specially formulated to protect heavy duty diesel wet sleeve liners. SCA addition is application dependant and should only be added as and when required by the vehicle's OEM. This coolant is compatible with coolant filters and heavy duty diesel SCAs and coolant extenders. When used as a 50% coolant with softened or de-ionized water, this engine coolant offers the following advantages:

- Low silicate
- Phosphate and amine free
- OEM approved
- Hard water compatible
- No initial SCA requirement at initial fill
- Universal use, fully meets or exceeds standard industry requirements for automotive, light duty, and heavy duty diesel applications
- Product is compatible with both conventional and OAT coolants (although to get best performance [regarding issues such as extended life and time between SCA additions] it is best to flush the old coolant and replace with Procool Commercial 5050 Coolant)
- Product is compatible with standard SCAs and coolant extenders
- Extended life 4 years, 12,000 hours or 1000,000 km whichever comes first

Procool Commercial 5050 Engine Coolant meets or exceeds the performance requirements of the following engine coolant specifications:

- ASTM D-3306, D-4985, D-6210
- Caterpillar EC1
- Cummins 14603
- Detroit Diesel 7SE 298
- DaimlerChrysler MS 7170, MS 9769
- Peterbilt 8502.002
- GM 1825M, 1899M, GM Heavy Truck
- Hyundai
- JIS K2234
- Kenworth RO26-170-97
- Landrover
- MACK Trucks
- Ford ESE-M97B44A, ESE-M97B18-C, Ford WSS-M97B51-A1
- Perkins
- MAN 324
- Mercedes Benz DBL 325
- MTU MTL 5048
- New Holland WSN-M97B18-D
- PACCAR
- Freightliner 48-2288D
- Saab-Scania 6901
- SAE J1034, J1941
- TMC RP 329
- Volvo Heavy Truck (Approved)
- Suitable for Toyota
- US Federal A-A-870-A

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Procool Commercial 5050 Engine Coolant is also approved by the following OEMs:

MTU
Detroit Diesel
Daimler Chrysler

Procool Commercial 5050 Engine Coolant provides exceptional summer cooling and excellent freezing protection during winter. The product is supplied 50% premixed, ready to use, and should not be diluted further.

Procool Commercial 5050 Engine Coolant provides excellent value as an aluminium compatible, universal, long life engine coolant. Along with this value, Procool offers you and your customers continuing commitment to:

- Reliable supply
- Consistent high-quality product
- Unsurpassed technology
- Valuable technical service backup
- Education on safe use and handling

For more information on Procool Engine Coolants for your application contact your Procool representative.

PROCOOL COMMERCIAL 5050 ENGINE COOLANT PERFORMANCE TESTING

| Coupon | ASTM D-1384 | | ASTM D-2570 | |
|---------------------|---------------------------|-------------------------|-----------------------------|-------------------------|
| | Glassware Corrosion | | Simulated Service | |
| Type ¹ | Test Results ¹ | Max. Spec. ¹ | Test Results ^{1,2} | Max. Spec. ¹ |
| Copper | 1.7 | 10 | 1.1 | 20 |
| Solder ³ | 4.3 | 30 | 21.6 | 60 |
| Brass | 0.6 | 10 | 1.6 | 20 |
| Steel | 0.1 | 10 | +0.8 | 20 |
| Cast Iron | +0.8 | 10 | +1.2 | 20 |
| Aluminium | +0.3 | 30 | +2.5 | 60 |

¹ Wt./loss coupon in mg.

² Copper/brass radiator results.

³ Regular 70/30 lead on copper/brass coupons.

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| ASTM Test Procedure | Test Results | Specification |
|---|-------------------------------|---------------|
| D4340 Heat Rejecting Aluminium Corrosion | 0.16 mg/cm ² /week | 1.0 maximum |
| D2809 Aluminium Water Pump Cavitation-Erosion Corrosion (rating from 1 to 10) | 10 | 8 minimum |

Shelf-life stability: minimum 2 years from date of manufacture

PROCOOL COMMERCIAL 5050 ENGINE COOLANT PHYSICAL & CHEMICAL PROPERTIES

| Test | Performance | Test Method |
|--------------------------------|----------------|-------------|
| pH | 7.6 - 8.5 | ASTM D-1287 |
| Reserve Alkalinity (ml) | 3 min. | ASTM D-1121 |
| Specific Gravity (15.6°C/60°F) | 1.065 - 1.075 | ASTM D-1122 |
| Freeze Point | -37°C +/- 34°F | ASTM D-1177 |
| Foam Volume (ml) | 50 max. | ASTM D-1881 |
| Break Time (sec) | 5 max. | ASTM D-1881 |
| Ash Content (wt. %) | 2.5 max. | ASTM D-1119 |
| Odour | Characteristic | |
| Colour | Green | |
| Total Glycols (Weight %) | 50 min. | |
| Inhibitors and dye (Weight %) | 2.5 max. | |
| Chloride ppm | 25 max. | ASTM D-3634 |
| Silicon (ppm) | 92.5 max. | ICP |

The performance and physical property data described for this product is typical results not sale specifications except where maximum or minimum is indicated.

Notice: Because use conditions and applicable laws may differ from one location to another and may change with time, the customer is responsible for determining whether products and the information in this document is appropriate for their use and for ensuring that their workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Procool's warranty is limited to the claims of product meeting stated specifications. It is the responsibility of the end user to determine product suitability as recommended in the Owner's Manual and to follow engine manufacturer's instructions.