



# **Radicool Heavy Duty**

Antifreeze / coolant concentrate

### Description

Castrol Radicool Heavy Duty is a coolant concentrate engineered to deliver maximum protection in heavy duty diesel engines. This product is suitable for trucks and off highway equipment requiring ASTM D 4985 type performance. This coolant can be used in a wide range of vehicles including cars, trucks and buses, in both gasoline and diesel engines. Castrol Radicool Heavy Duty works over a wide operating temperature range for effective engine cooling in all climates. Castrol Radicool Heavy Duty provides superior wet sleeve liner cavitation protection due to a universal formulation that incorporates nitrites and is low in total dissolved solids and silicates.

## Application

- The phophate-free formula reduces the risk of scale, and the inclusion of state of the art corrosion inhibitors eliminates the need for expensive de-ionized water.
- Castrol Radicool Heavy Duty should be used at concentrations between 33 % and 50% dilution with purified water. To give optimum corrosion protection and freezing protection to -37 °C it is recommended that a 50% dilution is used. A 3 year service life is possible at this concentration.
- Meets the performance requirements of most major automotive specifications for conventional antifreeze, allowing operators of
  mixed fleets to stock one antifreeze for all their vehicles, simplifying fleet maintenance procedures.
- For maximum performance Castrol Radicool Heavy Duty should not be mixed with other coolants. It is therefore recommended that cooling systems should be drained and flushed before re-filling with diluted Castrol Radicool Heavy Duty coolant.

### Warranty and Protection Requirements

• Exceeds all manufacturer's warranty requirements for applications requiring a universal heavy duty coolant which meets the specifications noted below:

#### **Industry Specifications and OEM Approvals**

(Product diluted 50:50 by volume with water)

| <u>Heavy Duty</u>             | <u>Automotive</u>                   |  |  |
|-------------------------------|-------------------------------------|--|--|
| ASTM D-5345                   | ASTM D-3306                         |  |  |
| ASTM D-6210                   | ASTM D-4340                         |  |  |
| Caterpillar (except CAT EC-1) | ASTM D-4656                         |  |  |
| Cummins 14603                 | Chrylser MS7170 Sec. A & B 1-4      |  |  |
| Cummins 90T8-4                | CID A-A-52624                       |  |  |
| Detroit Diesel 7SE298         | Ford ESE-M9B44-a Sec. 3.1.1 & 3.1.2 |  |  |
| Freightliner 48-22880         | GM 1825M                            |  |  |
| GM 1899M                      | John Deere H24A2/H24C2              |  |  |
| John Deere H24A2/H24C2        | SAE J1034                           |  |  |
| Mack Truck                    | SAE J1941                           |  |  |
| MTU                           | Volvo-GM Heavy Truck                |  |  |
| Navistar B-1                  |                                     |  |  |
| SAE J1941                     |                                     |  |  |
| TMC RP 329                    |                                     |  |  |
| Volvo-GM Heavy Truck          |                                     |  |  |

### **Typical Characteristics**

| Name                                     | Method     | Units       | Radicool Heavy Duty Coolant |
|--|------------|-------------|-----------------------------|
| Appearance                               | Visual     | -           | Clear & Bright              |
| Colour                                   | Visual     | -           | Pink                        |
| pH, 50 Vol%                              | ASTM D1287 | -           | 10.4                        |
| Reserve Alkalinity                       | ASTM D1121 | ml 0.1N HCI | 7                           |
| Boiling Point of Engine Coolants         | ASTM D1120 | °C (F)      | 164 (327)                   |
| Specific Gravity @60F                    | ASTM D1122 | g/ml        | 1.13                        |
| Freezing Point, Coolant 50% vol in water | ASTM D1177 | °C (F)      | -38 (-36)                   |
| Boiling Point, Coolant 50% vol in water  | ASTM D1120 | °C (F)      | 108 (226)                   |
| Effect on Automotive Finish              | ASTM D1882 |             | None                        |
| Chloride                                 | ASTM D5827 | ppm         | 20                          |
| Ash                                      | ASTM D1119 | wt%         | 1                           |
| Water                                    | ASTM D1123 | wt%         | 3                           |

\* Due to continual product research and development, the information contained herein is based on products purchased in the U.S. and subject to change without notification. Typical properties may vary slightly.

### Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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