

### PRODUCT DESCRIPTION

Vertex HDD Cool is a Type A ethylene glycol-based coolant free of 2-Ethylhexanoic acid, phosphates, silicates, and amines featuring an advanced hybrid (HOAT) formulation with low inhibitor rate depletion, ensuring prolonged protection without initial or supplemental coolant additives. Specifically engineered to offer exceptional pitting corrosion protection for heavy and light-duty petrol and diesel engines, stationary power units, marine vessels, and farm equipment. The hybrid inhibitor package guarantees optimal heat transfer efficiency, reducing operational temperatures and providing comprehensive protection against foams, rust, corrosion, cavitation, scaling, and oxidation. Offers a protection period of up to 7 years, 1,200,000 kilometers, or 20,000 hours for heavy-duty diesel engines at a 50/50 dilution ratio. Suitable for on-road trucks, off-road mining vehicles, farm machinery, and marine applications. Also suitable for passenger and light-duty vehicles, ensuring protection for at least 7 years or 500,000 km. Ideal for heavy-duty vehicles, offering cylinder liner protection. Dilution recommended at a concentration of 50% volume per volume (vv) with deionized water to guarantee freezing protection. Provides freezing protection down to -37°C and a boiling point of 107°C.

Instructions for use:

Vertex recommends using Deionised Water for dilution.

Ensure water properties meet specified criteria:

- Water hardness 0 to 20 °dGH.
- Chloride content maximum of 100 ppm.
- Sulphate content maximum of 100 ppm.

### APPLICATIONS & BENEFITS

- Type A ethylene glycol-based coolant with advanced hybrid (HOAT) formulation.
- Free of 2-Ethylhexanoic acid, phosphates, silicates, and amines.
- Low inhibitor rate depletion ensures prolonged protection without additional additives.
- Engineered for exceptional pitting corrosion protection in heavy and light-duty petrol and diesel engines, stationary power units, marine vessels, and farm equipment.
- Hybrid inhibitor package ensures optimal heat transfer efficiency, reducing temperatures and providing comprehensive protection against foams, rust, corrosion, cavitation, scaling, and oxidation.
- Offers up to 7 years, 1,200,000 kilometres, or 20,000 hours of protection for heavy-duty diesel engines at a 50/50 dilution ratio.
- Suitable for on-road trucks, off-road mining vehicles, farm machinery, marine applications, passenger, and light-duty vehicles.
- Provides cylinder liner protection.
- Dilution at 50% vv with deionized water ensures freezing protection to -37°C and boiling point of 107°C.

### PACK SIZES AVAILABLE

5L, 20L, 205L

### SPECIFICATIONS

- |                                  |                            |                            |
|----------------------------------|----------------------------|----------------------------|
| • AS 2108:2004 Type A            | • Caterpillar EC-1         | • Cummins 14603            |
| • Detroit Diesel 7SE298          | • Ford ESE-M97B44A         | • Ford WSS-M97B51-A1       |
| • Freightliner 48-22880          | • KOMATSU                  | • Land Rover               |
| • ASTM D 3306/4985/6210          | • Chrysler MS7170 & MS9769 | • GM 6277M, GM Heavy Truck |
| • Federal Specification A-A-870A | • Ford WSS-M97B44D         | • New Holland              |
| • Kenworth                       | • John Deere               | • Terex                    |

The information contained in this Product Data Sheet is accurate at the time of printing and is subject to change without prior notice.

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- Mack 014 GS 17009
- Paccar
- Thermo king
- MAN 324
- Peterbilt
- TMC RP 329/338
- MTU MTL 5048
- Perkins
- Volvo
- Navistar/ITE CEMS B-1
- Scania
- White stars

### TYPICAL CHARACTERISTICS

HDD COOL	METHOD	VALUES
Chemical Nature:	Proprietary Formulation	Ethylene glycol plus corrosion inhibitors
Appearance	Visual	Clear Liquid without solid matter
Colour	Visual	Yellow
Density at 20 °C	DIN5175-3	1.11-1.13 g/cm <sup>3</sup>
Boiling Point	ASTM D1120	107°C
Reserve Alkalinity, mL	ASTM D1121	4-6
Conductivity, mS/cm	ASTM D1125	>2.0
pH Value	ASTM D1287	8.0-10.0
Freezing point @ mix ratio, %, vv. 50	ASTM D1177	-37°C
Foam characteristics	ASTM D1188	<50mL/<3s
Miscibility with water	Visual	freely miscible
Hard water stability	Visual	stable, no precipitation
Typical ASTM Corrosion Performance		
Glassware Corrosion Test ASTM D 1384		
Metal and alloy	Weight loss (mg/coupon)	Spec. limit (mg/coupon)
Copper	1	10 max
Solder	0	30 max
Brass	0	10 max
Steel	0	10 max
Cast Iron	0	10 max
Cast Aluminium	2	30 max
* Negative values mean increase of weight		

### ADDITIONAL INFORMATION

- Product needs to be diluted @ 50% vv.
- Always dispose used coolants in accordance with state regulations
- The products contain Bittering agents.
- Product can be stored for 5 years provided container remains sealed.
- Full System Flush is recommended before using this product.

Designed for New Zealand Conditions | Manufactured from virgin base stocks. For more technical information please contact Vertex Lubricants NZ Technical Dept. +64 9 640 0004. Sheet updated 18 March 2024.