

HD COOL ORA ULTRA

High performance engine coolant concentrate

DESCRIPTION

HD COOL ORA ULTRA is a high-performance coolant concentrate providing corrosion protection by interacting with the metal surfaces where needed (engine blocks, cylinder heads, liners, water pumps and radiators).

HD COOL ORA ULTRA contains organic additives (OAT – Organic Acid Technology) for extended drain intervals.

Also available as a 50:50 mix called HD COOL ORA.

ADVANTAGES

- Phosphate free formula to avoid scale formation on hot engine surfaces
- Excellent thermal exchange improving engine cooling efficiency and prevents from boiling
- Extended drain intervals thanks to low corrosion inhibitors consumption
- Avoids cavitation and increases water pump lifetime
- Compatible with seals, hoses, pipes and parts made of plastic
- Nitrite free, amine free, borate free and silicate free

TECHNICAL INFORMATION

Characteristics	Method	Units	Norms
Color	Visual		Orange fluo
Density at 20°C / 68°F	ASTM D5931	g/mL	1.114
pH	ASTM D 1287		9.1
Initial crystallization	ASTM D1177	°C / °F	-37 / -35
Freezing protection		°C / °F	-37 / -35
Boiling point	ASTM D1120	°C / °F	177 / 351

Contains a bitterness agent to prevent from drinking: coolants and concentrates have a sweet taste but are harmful.

SPECIFICATIONS / APPROVALS / STANDARDS

HD COOL ORA ULTRA meets or exceeds the most common specifications and OEM requirements:

- ADE – ADE
- Bergen Engines – 2.13.01
- Case New Holland – MAT 3624
- Cummins – IS series u N14
- Cummins – CES 14603
- Cummins – CES 14439
- DAF – 74002
- Detroit Diesel – DFS 93K217
- Deutz – DQC CB-14
- Fendt
- Isuzu
- Jenbacher – TA 1000-0201
- John Deere – JDM H5
- Kobelco
- Komatsu – 07.982 (2009)
- Leyland Trucks – DW03245403
- Liebherr – MD1-36-130
- Mack – 014 GS 17009
- MAK
- MAN – 324 Type SNF
- MAN B&W A/S
- MAN B&W AG D36 5600
- Mercedes-Benz – 325.3
- Mitsubishi – MHI
- MTU – MTL 5048
- MWM – 0199-99-2091 / 12
- Renault Trucks – 41-01-001/--S Type D
- SACM Diesel - DLP799861
- Semt Pielstick
- Tedom
- Thermo King
- Valtra
- Van Hool
- Volvo Construction
- Volvo Penta
- Volvo Trucks
- Waukesha
- Wärtsilä – 32-9011
- Yanmar

HD COOL ORA ULTRA meets the following standards:

- ASTM Standards – ASTM D3306 / D4985 / D6210
- British Standards – BS 6580
- JASO Standards – M325
- Japanese Standards – JIS K2234
- Korean Standards – KSM 2142
- NATO Standards – NATO S-759
- NFR Standards – NFR 15-601
- UNE Standards – UNE 26-361-88/1
- SAE Standards – SAE J1034

APPLICATIONS

HD COOL ORA ULTRA is strongly recommended for all cooling systems of heavy duty, construction, mining, agriculture vehicles and equipment, gardening, ships, stationary engines, ...

RECOMMENDATIONS

- Must be used diluted in water. For better results, use demineralized water,
- To maintain anti-corrosion properties, do not dilute below 33%. Refer to chart for dilution rates,
- To be used for top-up or complete renewal of the cooling circuit for improved efficiency,
- Drain intervals: Refer to the manufacturers' recommendation,
- Attention, control or drain the coolant only when the engine is cold,
- Can be mixed with ethylene glycol-based coolants,
- Avoid mixing with other products for maximum performance,
- This product should not be used to protect drinking water systems from freezing.

HD COOL ORA ULTRA (%)	33	40	50	60
Freeze Point Protection (T°C / T°F)	-22 / -3	-30 / -22	-41 / -42	-54 / -65
Boiling Point Protection (T°C / T°F)	132 / 282	136 / 277	134 / 273	132 / 269

SERVICE AND EQUIPMENT

In addition to its product ranges, Motul can provide tools and services for the maintenance and in-use monitoring of your lubricants. Please contact your technical sales representative.

IMPORTANT NOTICE

All information and rules about health, safety and the environment are mentioned on the safety data sheet. It provides information about risks, safety procedures and first aid emergency rules. It clarifies all procedures to implement in the case of an accidental spillage, and for the disposal of the product and its effects on the environment.

Our product contains natural additives which are likely to modify the colour of the concentrates without altering its performance. The specifications of our products are definite only at the time of order, and are subject to our general sale and guarantee conditions. To give our customers the latest technical developments, the general characteristics of our products may vary. The safety data sheet of this product is available at www.motul.com