

Concentrated antifreeze
Anti-corrosion & antifreeze
Technology Organic Tech
Nitrite free / Amine free / Phosphate free / Borate free / Silicate free

### TYPE OF USE

MOTUL AUTO COOL OPTIMAL ULTRA is a concentrated long life antifreeze that should be mixed with soft water for immediate use as a cooling liquid, based on monoethyleneglycol, using an Organic Acid Technology (OAT) additivation named Organic Tech.

Strongly recommended for all cooling systems: passenger cars, heavy duty, construction and agriculture vehicles, gardening, ships, stationary engines ...

#### **PERFORMANCES**

STANDARDS AND MANUFACTURER SPECIFICATIONS: Refer to chart.

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

Optimal protection of cooling systems against freezing and metallic parts against corrosion.

OAT technology provides an excellent thermal exchange and therefore improves engine cooling efficiency and prevents from boiling.

This organic technology provides anti-corrosion properties that remain at high temperature and aging. Low corrosion inhibitors consumption allows extended drain intervals.

Water pump protection, avoids cavitation.

Seals, rubber pipes, hoses and plastic parts friendly.



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### **RECOMMENDATIONS**

PROTECTION		AUTO COOL OPTIMAL ULTRA
T °C / T °F	T °C / T °F*	%
-22°C / -8°F	132°C / 269°F	33%
-30°C / -22°F	134°C / 273°F	40%
-41°C / -42°F	136°C / 277°F	50%
-54°C / -65°F	139°C / 282°F	60%

#### \* +1,5 Bar

Do not use pure product.

Mix with soft water according to the required freezing protection: refer to chart.

To maintain anti-corrosion properties, do not dilute below 33%.

Water for dilution: If possible, use soft water: Maximum hardness 35°F and chlorides and sulfates maximum contain 500 ppm.

Drain intervals: Refer to the manufacturers' recommendation.

Attention, control or drain the coolant only when the engine is cold.

Do not mix with non-organic products.



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This product should not be used to protect drinking water systems against freezing.

Dangerous. Respect the use and handling recommendations.

### **PROPERTIES**

Color	Visual	Red
Density at 20°C (68°F)	ASTM D4052	1.112
Sulfated Ash	ASTM D1119	% weight 1.10
Alkalinity reserve	ASTM D1121	6.2 mg KOH/g
Boiling point	ASTM D1120	180°C / 356°F



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STANDARDS				
ASTM STANDARD	D3306, D4656			
BRB	BR 637			
BRITISH STANDARD	BS 6580			
FVV STANDARD	Germany FVV Heft R443			
UNE STANDARD	26-361-88/1			
OEM PERFORMANCES				
AUDI	TL-774 D = G 12, TL-774 F = G 12+			
CUMMINS	32-9011, IS series & N14			
DAF	74002			
DETROIT DIESEL	Power Cool Plus			
DEUTZ	0199-99-1115, 0199-99-2091			
FIAT	9.55523			
FORD	WSS-M97B44-D			
GENERAL MOTORS	GM 6277M (+B040 1065)			
JAGUAR LAND ROVER	CMR 8229, WSS-M97B44-D			
JOHN DEERE	JDM H5			
KOMATSU	07.892 (2007)			
LAND ROVER	CMR 8229, WSS-M97B44-D, WSS-M97B44-D			
LEYLAND	DW03245403			
LIEBHERR	MD1-36-130			
MAN	324 typ SNF, D36 5600			
MAZDA	MEZ MN 121 D			
MERCEDES-BENZ	MB 325.3			
MITSUBISHI	JQ07913-014			
MTU	MTL 5048			
MWM	0199-99-2091			
NISSAN	Renault 41-01-001/S Type D			
OPEL	GM 6277M (+B040 1065), QL 130100			
RENAULT	41-01-001/S Type D			
SAAB	GM 6277M (+B040 1065)			
SEAT	TL-774 D = G 12, TL-774 F = G 12+			
SKODA	61-0-0257, TL-774 D = G 12, TL-774 F = G 12+			
VAUXHALL	GM 6277M (+B040 1065), QL 130100			
VOLVO	128 6083 / 002			
VW	TL-774 D = G 12, TL-774 F = G 12+			
WÄRTSILÄ	32-9011			
PRODUCTS				
MAK	A4.05.09.01			
SACM DIESEL	DLP799861			

We retain the right to modify the general characteristics of our products in order to offer to our customers the latest technical development.

Product specifications are definitive from the order which is subject to our general conditions of sale and warranty.