

MWM Premium Antifreeze –20

High-performance coolant for MWM diesel and gas engines.

With increasing engine power and higher levels of efficiency, the thermal loading of engine components adjoining the combustion chamber increases. The main task of the coolant is to discharge the combustion heat from these components (component cooling) and provide it to the customer as useful heat. The coolant is therefore not only responsible for a continuously safe engine operation, but also for efficient use of the plant.

Like lube oils, coolants are tested in intensive field tests and approved for use. Based on the long-standing experience of our development engineers, as well as extensive assessment of field experiences of the MWM service organization, the inhibitor technology for MWM Premium Antifreeze –20 has been selected together with a strategic partner.

MWM Premium Antifreeze –20

- ✓ Suitable for all MWM diesel and gas engines
- ✓ Suitable for all plant configurations (exhaust heat exchanger in the engine and heating circuit)
- ✓ Contains silicate – effective corrosion protection due to hybrid technology
- ✓ Amine, nitrite and phosphate-free
- ✓ Small deposits on thermally high-loaded components such as the cylinder liner
- ✓ Extended exhaust heat exchanger service lives due to low total hardness
- ✓ Simple handling as a ready-mix

MWM Premium Antifreeze –20 has an optimized glycol content for safe frost and corrosion protection with a maximum heat transmission capacity.

The right mixture is important

The heat conductivity of coolants drops with an increasing glycol content. With a glycol content of 35 Vol. %, MWM Premium Antifreeze –20 is the optimum product for safe frost protection up to –23°C and has very good heat transmission properties at the same time. Non-organic and organic inhibitors are used in MWM Premium Antifreeze –20 as means of corrosion protection. These form a thin, heat-permeable protective layer on the wetted components.

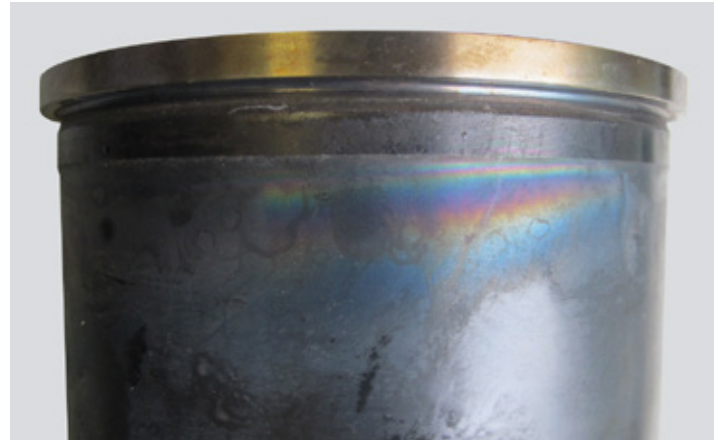
In order to ensure reliable protection of the engine, the correct inhibitor concentration of the coolant is particularly important. Overconcentration poses the risk of

damage to wetted components, and too low concentration of the inhibitor cannot guarantee a sufficient corrosion and cavitation protection. If cooler frost protection concentrates are used for preparing the coolant on site, the correct composition of the mixing water must also be considered, otherwise there may be deposits in the area of the exhaust heat exchanger.

As a read-mix, MWM Premium Antifreeze –20 always has the correct inhibitor and glycol concentration – an incorrect dosage is thus prevented. MWM Premium Antifreeze –20 is suitable for all plant configurations and can be comfortably filled during maintenance.

The focus when selecting the MWM Premium Antifreeze -20 inhibitor technology was on a low formation of deposits on thermally high-loaded components, since the heat transfer is inhibited by the formation of isolating layers in these areas (primarily cylinder liner and cylinder head), which may have adverse effects on oil consumption and valve wear.

MWM Premium Antifreeze -20 is characterized by excellent heat transfer, safe frost and corrosion protection and simple handling. The availability and economic efficiency of the plant is increased due to the use of MWM Premium Antifreeze -20.



Cylinder liner TCG 2016 after 10,000 oh with MWM Premium Antifreeze -20



Cylinder liner TCG 2016 after 8000 oh with heavy deposit formation due to an incorrect inhibitor dosage

Material properties of MWM Premium Antifreeze -20	
Product basis	Monoethylene glycol
Product group	contains silicate
Color	turquoise
pH value	8,1
Kin. viscosity at 40 °C	1,81 mm ² /s
Density	1063 kg/m ³
Total hardness	<1 °dH
Glycol content	35 Vol. %
Anti-freeze protection up to	-23 °C

Available in	
Barrel	205 l
IBC	1000 l



Do you have any questions on the topic of cooler frost protection ready-mix?

Contact your MWM Service Center or service@mwm.net.

