

Diesel Antifreeze

Bardahl Diesel Antifreeze is a versatile diesel/fuel oil fuel additive. It not only prevents the fuel from freezing, but also ensures better and cleaner combustion and can be used in any diesel engine (Euro1-Euro5). It prevents the formation of rust and corrosion in the fuel system and pipes; which in turn leads to lower maintenance costs and longer life of injectors and fuel pump.

The problem

Middle distillates such as diesel oil and light fuel oil consist of a mixture of different hydrocarbons: alkanes (saturated hydrocarbons in a straight line, branched and ring-linked), alkenes (unsaturated hydrocarbons or olefins) and aromatics. The rectilinear alkanes or n-paraffin are technically indispensable, because they provide most of the energy and must ensure clean combustion. Light fuel oil or diesel oil contains approximately 20% of this component. However, they also cause the adverse effect that can form with cold crystals. Crystals, in the form of plates, which clog fuel filters and pipes very easily.

Low temperatures, below freezing point, are the cause of the formation of these paraffin crystals. As the temperature continues to drop, more and more of these crystals will form.

These crystals have the annoying properties of clumping together and sinking to the bottom of the tank. The presence of agglomerated paraffin crystals in the fuel system and tank will clog fuel lines and fuel filters.

This in turn causes the engine or burner to malfunction due to lack of fuel. The fuel filter is a critical component here, which very quickly becomes clogged by paraffin crystals when cold and interrupts the fuel supply.

When in winter a diesel engine does not want to run or an oil heating installation fails, there is a problem that only considerable costs can be solved.

An additional problem is water in the diesel fuel. Every storage tank and car tank will 'breathe' under the influence of temperature differences, causing moist air to penetrate into the tank. Due to condensation of the moisture in this air, water will eventually form in the tank. This water will partly float in the fuel, in the form of very small droplets. In the event of frost, this moisture will freeze. Fuel filters also absorb this moisture from the fuel and in frost it freezes easily and the filter openings are reduced or even completely clogged. If paraffin crystals are added at low temperatures, such a filter will become clogged very quickly.

The working effect

These disadvantages can be effectively combated with **Bardahl Antifreeze**. It lowers the pour point of diesel fuels and heating oils and prevents pipes and filters from clogging. In addition, it acts as a fuel dryer, absorbing the moisture and burning it with it.

The effect of **Bardahl Diesel Antifreeze** has been measured in various European diesel fuels and heating oils. The area of application cannot be specified exactly, as the fuels contain a different percentage of paraffin depending on the place of origin.

Already in a ratio of 1:1000, **Bardahl Diesel Antifreeze** ensures that the fuel is already heated to approx. -30°C. is protected. The risk of the pipes and the filter becoming clogged is thus a thing of the past. In a ratio of 1:500, diesel antifreeze protects down to -33°C.



Advantages

- Lowers the pour point of diesel fuel and heating oil.
- Prevents formation of paraffin crystals and moisture.
- Prevents clogging of filters, strainers, valves and pumps.

Measured according to the CFPP method according to DIN standard 51428 and NF T standard 60-105 CFPP = cold filter plugging point = limit value of the filterability.

Bardahl diesel antifreeze	Bardahl diesel antifreeze	Winter diesel Protects up to	Zomer diesel Additional CFPP protection; °C	Pour point reduction; °C
1 ltr	1000	Max -30°C	10°C	13°C
2 ltr	1000	Max -33°C	15°C	18°C
3 ltr	1000	No extra protection	17°C	20°C

However, Bardahl Diesel Antifreeze is a versatile fuel additive and provides a number of additional benefits, which are of great importance throughout the year for the maximum functioning of a diesel engine or stool oil installation.

Applications

- More complete and cleaner combustion, less smoke, less fuel consumption.
- Keeps the fuel in optimal condition, outdated fuels become stable again due to the dissolving effect and the process of 'drying' the fuel.
- Keep nozzles and injectors clean, if one or more of the nozzles of the injectors become clogged with varnish (deposit of the fuel), the amount of fuel injected is reduced by 20 to 30%. This leads to a loss of power, the operation of the injectors can also be reduced due to the formation of varnish.
- Prevents the formation of rust and corrosion, rust particles reduce the throughput of the fuel filter, rust and corrosion forms in the tank, pipes and fuel system, corrosion in the pipes can cause blockages even more easily when the fuel flakes.

Article number	2501	Article number	2582
Content	100 ml	Content	25 liter
Article number	2551	Article number	2586
Content	1 liter	Content	60 liter
Article number	2555	Article number	2592
Content	5 liter	Content	210 liter