

# ROTHEN POLAR

## Antiparaffine Additive for Diesel

### DESCRIPTION

**ROTHEN POLAR** is an additive for winter, specific in the treatment of automotive diesel fuels. It was designed to prevent the crystallization of paraffines in the diesel at low temperatures, and to facilitate the spraying of fuel into the combustion chamber. This allows for an improve combustion, and prevents the formation of deposits and the emission of particulates both.

### APPLICATIONS

**ROTHEN POLAR** is an additive that is particularly recommended when temperatures reached by the fuel are likely to favor the process of crystallization of the paraffines contained in the diesel. This process occurs at different speeds, depending on the temperature at which it takes place: the lower the temperature, the faster the crystallization and the smaller the crystals that may form. Note that even with at a few degrees Celsius below zero, the crystallization of paraffines takes place with appreciable velocity.

### USES

**ROTHEN POLAR** should be added directly to the fuel at a percentage of 1-2 ‰. It must be added in the tank of the car, preferably before refueling (single-dose packs) or in the storage tank. This product is suitable for all diesel engines, bio-diesel and turbo, and is suitable for treating all types of diesel on the market.

### PERFORMANCE

Better behaviour with cold fuel

**ROTHEN POLAR** is a simple and economical solution to improve the so-called cold-sealing of diesels; in particular, it lowers the cloud point, reduces the filterability limit temperature and the pour point. Therefore, it ensures the necessary fluidity even at low temperatures and, simultaneously, an efficacious anti-settling. It also facilitates the cold starting of the engine during the winter or cold climates.

**Tested in laboratory by additivating standard diesel:**

**at 1 ‰, ROTHEN POLAR lowers the pour point to -19 ° C**

**at 2 ‰, ROTHEN POLAR lowers the pour point to -27 ° C**

**compared with the average result of -12 ° C found using standard, non-additive diesel.**

Antifreeze properties and cleaning of the fuel system

**ROTHEN POLAR** molecules, interposing between individual crystals, prevent their aggregation and, therefore, their growth and subsequent separation. The regular use of **ROTHEN POLAR**, preventing the separation of paraffines, avoids clogging and blockage of the fuel system, and in particular of the injectors.

Antioxidant capacity

Added to the diesel in the storage tank, **ROTHEN POLAR** inhibits the oxidative processes and the formation of gummy deposits.

### TYPICAL PHYSICAL-CHEMICAL CHARACTERISTICS: (\*)

FEATURE	UNIT OF MEASURE	METHOD	OUTCOME
Kinematic Viscosity at 25°C	mm <sup>2</sup> /s	ASTM D 445	18
Density at 15°C	Kg/l	ASTM D 1298	0.890 - 0.910
Inflammability Point	°C	ASTM D 93	65

(\*): The values are based on typical production, and may consequently vary.