

## GAZPROMNEFT ANTIFREEZE 40

GAZPROMNEFT ANTIFREEZE 40 is a ready-to-use traditional coolant based on ethylene glycol for internal combustion engines, including heavily loaded engines. Provides improved protection against cavitation.

### Application

- Cars and trucks, special equipment.
- Heavily loaded diesel and gas piston engines.
- Mining dump trucks.
- Stationary engines of mini-power plants.

### Advantages

- Effective corrosion protection – low-silicate additive package containing nitrites.
- Excellent cavitation protection – for “wet” cylinder liners.
- No deposits or scale – the additive package does not contain phosphates.
- Improved heat transfer – optimal temperature conditions for engine operation.
- Protection of the cooling system from freezing and boiling - the base component is ethylene glycol.

### Typical physical and chemical properties

Parameters	Method	GAZPROMNEFT ANTIFREEZE 40
Appearance	Visually	Transparent homogeneous red liquid without visible foreign inclusions
Density at 20 °C, g/cm <sup>3</sup>	ASTM D1122	1,070
Refractive index at 20 °C	GOST 18995.2	1,385
Boiling point, °C	ASTM D1120	108
Alkalinity reserve, ml	ASTM D1121	6,2
pH	ASTM D1287	9,7
Foamability	ASTM D1881	max 100 ml / 3 s
Chilling point, °C	ASTM D1177	-37

### Specifications and standards

- Cummins CES 14603, Caterpillar, Detroit Diesel 7SE298, General Motors 6038M, John Deere 8650-5, Case Corp. MS1710, New Holland 9-86, Navistar, Freightliner 48-22880, PACCAR, MACK, Waukesha 4-1974D, LLC Avtozavod GAZ, PJSC AVTOVAZ, OJSC UKH MMZ
- ASTM D3306, ASTM D4985, ASTM D6210, TMC RP329, SAE 1941, BS 6580-1992, GOST 33591-2015, China GB 29743

### Approvals

PJSC Avtodizel (YaMZ); PJSC KAMAZ

ASTM D1384. Corrosive effect on metals (corrosion in glass), 336 h, 88 °C

	Brass	Copper	Solder	Steel	Cast iron	Aluminum
	Average Plate Weight Change, mg*					
ASTM D3306 standard (max)	10	10	30	10	10	30
GAZPROMNEFT ANTIFREEZE 40	0	1	15	-1	-1	-1

\* Negative values mean weight gain

ASTM D4340. Hot surface corrosion, 25% vol., 168 h, 135 °C

	Weight loss, mg/cm/week
ASTM D3306 standard (max)	1,0
GAZPROMNEFT ANTIFREEZE 40	0,01

ASTM D2570. Dynamic corrosion test, 1064 h, 88 °C

	Brass	Copper	Solder	Steel	Cast iron	Aluminum
	Average weight change in mg per sample*					
ASTM D3306 standard (max)	20	20	60	20	20	60
GAZPROMNEFT ANTIFREEZE 40	0	1	25	0	-2	0

ASTM D2809. Pump cavitation, 100 h, 113 °C

Aluminum water pump	Rating	ASTM D3306 standard
GAZPROMNEFT ANTIFREEZE 40	8	min 8

**The company's management system is certified in accordance with the international standards**

**ISO 9001**



**ISO 14001**



**ISO 45001**

