

## G-ENERGY ANTIFREEZE 40 PRO G12+

Ready-to-use liquid coolant based on ethylene glycol and organic acid salts (OAT-technology). Intended for cooling systems of internal combustion engines. Provides comprehensive protection against corrosion. It is a solution of concentrate and water in a ratio of 50/50 by volume. Freezing protection temperature is -40 °C.

### Application:

- Light motor and load-carrying vehicles, stationary diesel engines, special vehicles, buses.

### Advantages:

- Meets the requirements of MAN 324 SNF and VW TL 774-F (G12+) specifications.
- The additive package is manufactured according to silicate-free technology based on organic acid salts.
- Can be used in both cast iron and aluminum engines.
- Does not form deposits and scale.
- Reliably and permanently protects against corrosion.
- Prevents cavitation.
- Has no tendency to foam formation.

### Typical physical and chemical properties

| Parameters                          | Method       | G-Energy Antifreeze 40 PRO G12+                                      |
|-------------------------------------|--------------|----------------------------------------------------------------------|
| Appearance                          | Visually     | Transparent homogenous 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                                                                  |
| pH                                  | ASTM D1287   | 9.2                                                                  |
| Alkalinity reserve, ml              | ASTM D1121   | 8.0                                                                  |
| Chilling point, °C                  | ASTM D1177   | - 37                                                                 |
| Foamability                         | ASTM D1881   | max 50 ml / 3 s                                                      |

### Specifications:

- DAF MAT 74002, Deutz, Ford, MAN 324 Typ SNF, MB 325.3, MTU MTL 5048, Porsche, VW TL-774 F (G12+) Audi /Seat /Skoda, JIS K 2234, GM 6277M

### Standards:

- Afnor NF R15-601, AS 2108-2004, ASTM D3306, ASTM D4985, BS 6580-2010, CUNA NC 956-16, ONORM V 5123, SAE J1034, SANS 1251:2005, SH 0521-1999

### Corrosion in Glassware Test, ASTM D1384

|                                 | Brass                               | Copper | Solder | Steel | Cast iron | Aluminum |
|---------------------------------|-------------------------------------|--------|--------|-------|-----------|----------|
|                                 | Weight loss <sup>1</sup> , mg/plate |        |        |       |           |          |
| ASTM D3306 standard (max)       | ±10                                 | ±10    | ±30    | ±10   | ±10       | ±30      |
| G-Energy Antifreeze PRO 40 G12+ | 2,57                                | 1,23   | 0,9    | 0,43  | 1,3       | 3,0      |

1 - negative values indicate weight gain

### Hot Surface Corrosion Test, ASTM D4340

|          | Weight loss <sup>1</sup> , mg/cm/week | ASTM D3306 standard |
|----------|---------------------------------------|---------------------|
| Aluminum | 0,38                                  | ±1,0                |

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

ISO 9001



ISO 14001



ISO 45001

