

G-ENERGY ANTIFREEZE NF

Ready-to-use liquid coolant based on ethylene glycol, salts of carboxylic acids and silicates (hybrid type). Intended for cooling systems of internal combustion engines. When ready to use, it provides improved protection against cavitation and highly efficient cooling of engines at ambient temperature according to the recommendations for dilution with water. Before use, dilute the concentrate with distilled water. Do not use without dilution.

Application:

- Light motor and load-carrying vehicles, buses.
- Stationary engines, special vehicles.
- The concentrate is not used as an operating liquid coolant.
- Before use, the concentrate must be diluted with water from 40% to 60%, see the graph.
- The optimal liquid coolant concentration is 50%.
- Use distilled or demineralized (filtered) water for dilution.

Advantages:

- Contains a hybrid package of corrosion inhibitors based on salts of organic acids and silicates.
- Contains no nitrites, amines, phosphates and borates (NF – Nitrite Free).
- Protects the engine from corrosion, overheating and defrosting.
- Provides the highest degree of corrosion protection for the cylinder block, block head, radiator, pump, heat exchangers.

Typical physical and chemical properties

Parameters	Method	G-Energy Antifreeze NF
Appearance	Visually	Transparent homogeneous blue-green liquid without visible foreign inclusions
Density at 20 °C, g/cm ³	ASTM D 1122	1.125
Refractive index at 20 °C	GOST 18995.2	1.433
Boiling point, °C	ASTM D1120	> 160
pH (50% dilution)	ASTM D1287	7.6
Alkalinity reserve (50% dilution), ml	ASTM D1121	17.6
Water content, %	ASTM D 1119	< 5
Chilling point, 50% vol., °C	ASTM D 1177	- 38
Foamability, 33% vol.	ASTM D 1881	max 50 ml / 3 s

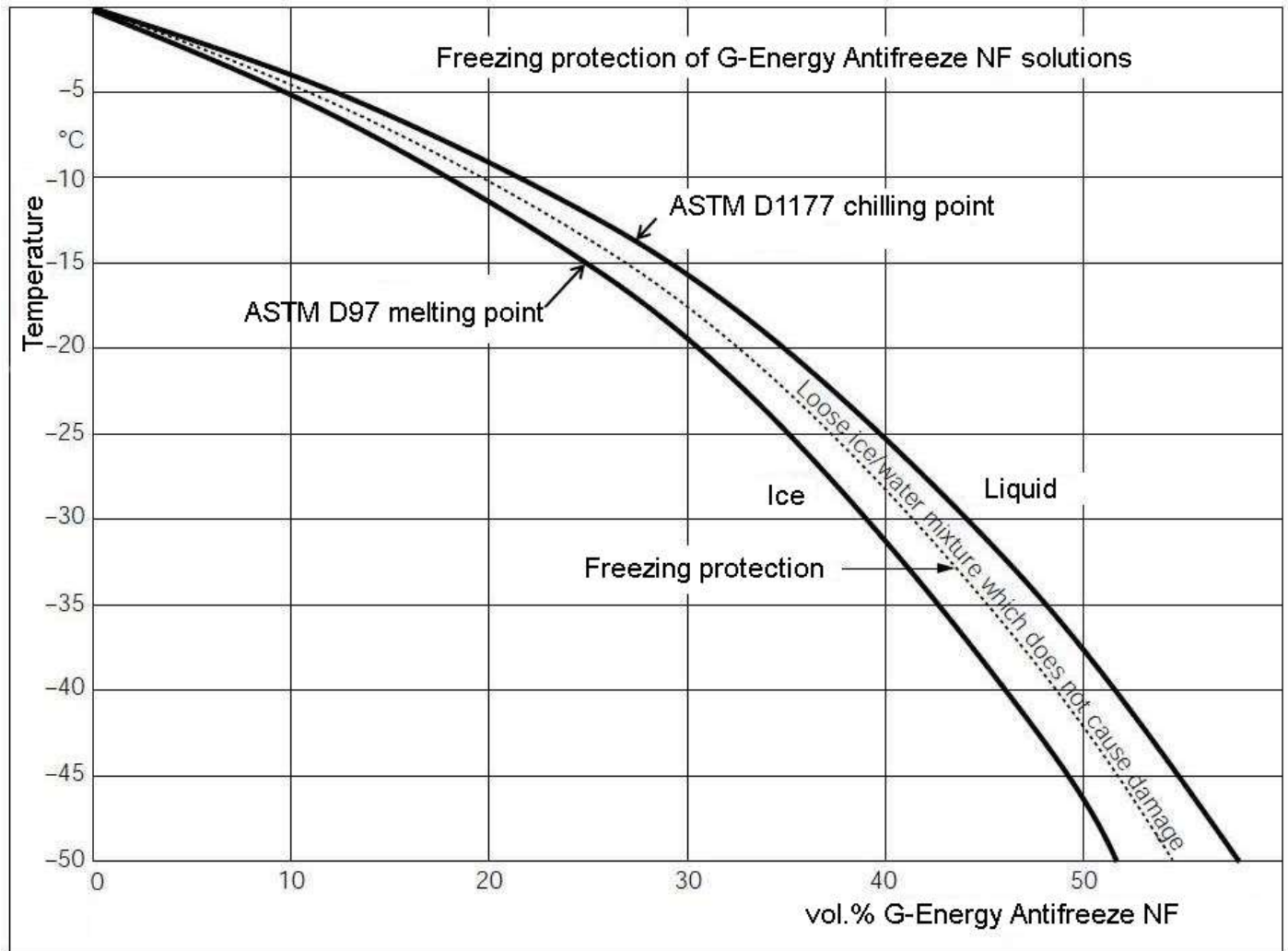
Specifications:

- VW (Audi, Seat, Skoda) TL 774-C (G-11), MAN 324 NF, MB-Approval 325.0, Jenbacher TA-Nr. 1000-0201, DEUTZ DQC CA-14, Liebherr Machines Bulle TLV 035, TLV 23009 A, Porsche 924, 928, 944, 968, Saab 6901599, General Motors B 040 0240, BMW N 600 69.0, BMW LC-87, Ford, Iveco, MTU MTL 5048

Standards:

- ASTM D3306, ASTM D4985, AS 2108-2004, ÖNORM V 5123, CUNA NC 956-16, SANS 1251:2005, BS 6580-2010, GOST 33591-2015

Graph of freezing protection temperature* depending on the volume concentration



*Freezing protection temperature is the arithmetic mean between chilling point (appearance of crystals) and melting point (loss of fluidity)

Corrosion in Glassware Test, ASTM D1384

	Brass	Copper	Solder	Steel	Cast iron	Aluminum
	Weight loss ¹ , mg/plate					
ASTM D3306 standard (max.)	10	10	30	10	10	30
G-Energy Antifreeze NF	2.0	2.0	-3.0	-1.0	-1.0	0

1 - negative values indicate weight gain

Hot Surface Corrosion Test, ASTM D4340

	Weight loss ¹ , mg/cm ² /week	ASTM D3306 standard
Aluminum	-0.1	max. 1.0

2 - test results on the concentrate of G-Energy Antifreeze NF 40 using aggressively corrosive water

Dynamic Corrosion Test, ASTM D2570

	Brass	Copper	Solder	Steel	Cast iron	Aluminum
	Weight loss ¹ , mg/plate					
ASTM D3306 standard (max.)	20	20	60	20	20	60
G-Energy Antifreeze NF	6.0	7.0	-1.0	-1.0	-3.0	1.0

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

ISO 9001



ISO 14001



ISO 45001

