

## KÜHLER G13 COOLANT & ANTI-FREEZE (PURPLE / VIOLET)

### Product Description

**KÜHLER G13 Coolant & Anti-Freeze (Purple / Violet)** is a premium, long-life radiator coolant and antifreeze designed using Hybrid Organic Acid Technology (Si-OAT) and a unique base of monoethylene glycol and glycerin. It ensures high-temperature stability, excellent long-term corrosion protection, and improved environmental performance. G13 is recommended for the latest-generation engines, especially in European vehicles, and is backward-compatible with G12++, G12+, and G12 coolants.

### Product Features & Benefits

- Long-life protection for up to 5 years or 250,000 km
- Improved heat transfer & boiling protection for high-efficiency engines
- Enhanced protection for aluminum, magnesium, and mixed-metal systems
- Lower environmental footprint with glycerin-based blend
- Silicate-stabilized hybrid organic technology
- Fully miscible with G12++, G12+, and G12

### Application

Recommended for all light-duty and heavy-duty cooling systems in gasoline and diesel engines where G13 hybrid OAT coolant is required.

Application (One Line):

For modern aluminum-based engines requiring G13-type Si-OAT coolant with extended protection.

### Meets or Exceeds

Petrovöll KÜHLER G13 meets or exceeds:

- VW TL 774-J (G13)
- MAN 324 Si-OAT
- MB 325.5
- Audi / Skoda / Seat (post-2012)
- SAE J1034
- ASTM D3306 / D4985
- BS 6580:2010

### Typical Properties

Property	Method	Unit
Appearance	Visual	Clear Purple or Violet
Odor	Mild	—
Density @ 20°C	ASTM D1122	1.115 - 1.125 g/cm <sup>3</sup>
pH (33% solution)	ASTM D1287	7.5 - 8.4
Boiling Point (undiluted)	ASTM D1120	≥ 170°C
Freezing Point (50:50 dilution)	ASTM D1177	-36°C
Reserve Alkalinity	ASTM D1121	≥ 6.0 mL
Silicate Content	XRF	250 - 300 ppm
Glycerin Content	GC	~10-15%
Ash Content	ASTM D1119	≤ 5.0%
Water Content	ASTM D1123	≤ 5.0%
Foam Test	ASTM D1881	< 50 ml / < 5 sec
Cavitation Test (Aluminum pump)	ASTM D2809	8+ rating
Corrosion Test (Glassware)	ASTM D1384	Pass



## Dilution & Mixing

Coolant : Water	Freeze Protection	Boiling Point (approx.)
33:67	-18°C	~104°C
50:50	-36°C	~107°C
60:40	-52°C	~110°C

**Note:** Use only deionized or distilled water. Do not exceed 70% concentration.

## Storage & Handling

- Store in closed containers at temperatures between 5°C - 35°C
- Protect from frost, heat, and direct sunlight
- Shelf Life: 5 Years in sealed original container
- Avoid contact with skin and eyes
- Keep out of reach of children

### Supplied as:

- Concentrate
- Ready-to-Use (50:50 premix)

## Health & Safety

Refer to Safety Data Sheet (SDS) for complete handling and disposal instructions. Keep out of reach of children. Avoid discharge into drains or the environment.

