



Product Name: KÜHL G13 (Purple / Violet)

Application: Ideal for modern engines requiring G13 coolant with hybrid OAT/silicate formulation

Product Overview

KÜHL G13 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.

Application

- Recommended for all light-duty and heavy-duty cooling systems in gasoline and diesel engines where G13 hybrid OAT coolant is required.
- For modern aluminum-based engines requiring G13-type Si-OAT coolant with extended protection

Performance 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.

Meets and Approvals

- 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	Typical Value
Appearance	Visual	Clear Purple or Violet
Odor	Mild	—
Density @ 20°C	ASTM D1122	1.115 – 1.125 g/cm ³
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 Chart

Coolant : Water	Freeze Protection	Boiling Point
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 and 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.

