

# Viva Energy GF Coolant

## Glycol Free OAT Coolant - Concentrate



### Description

Viva Energy Viva Energy GF Coolant – Concentrate is a water based engine coolant that utilises organic acid technology (OAT).

This product is free of ethylene glycol, silicates, phosphates, borates, nitrates, nitrites and amines. It is fully compatible with other similarly formulated OAT coolants. The OAT corrosion inhibitors have shown little depletion from original levels during extensive laboratory and fleet testing.

When diluted to 7% it provides excellent protection in petrol, diesel and gas engines, in, buses, tractors, trucks, industrial equipment and mining equipment. When diluted to 5% with softened or demineralised water this product provides excellent cooling system protection for passenger cars. It can be used where an anti-freeze anti-boil product is not specified.

### Application & Performance Features

- **Excellent Engine Protection.** Suitable for use in passenger and heavy duty road vehicles and mining equipment for petrol, diesel and gas engines. An universal use coolant that designed to meet industry standards requirements for both automotive and heavy duty diesel applications.
- **Long Service Life.** In heavy duty applications - provides a service life of up to 4 years or 1,000,000km or 12,000 hours, whichever comes first. In passenger cars it provides 3 years, 100,000 Km service life.
- **Hard Water Compatible.**
- **Field compatibility.** Compatible with other long life organic acid technology (OAT) based engine coolants; for best performance it is recommended to flush the old coolant and replace entirely with premixed coolant at the desired dilution rates according to the application. It is also compatible with aluminium.
- **Dilution Rates:**
  - For Heavy Duty Applications : 7%
  - For Passenger Cars (with softened or demineralised water): 5%

For best results, Viva Energy GF Coolant must **NOT be mixed with conventional high pH, phosphate, borate, silicate containing coolants.** While deleterious effects are not expected to be significant, the mixing of conventional coolants with Viva Energy GF Coolant will result in a lower than expected lifetime (change-over intervals).

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### Performance Testing

Testing results as follows:

Coupon	ASTM D 1384-94 Glassware Corrosion		ASTM D2570-94 Simulated Service	
	Tests Results <sup>1</sup>	Max. Spec.	Tests Results <sup>1,2</sup>	Max. Spec.
Copper	0.1	10	+1.5	20
Solder	0.2	15	+13.7	60
Brass	0.0	10	+2.2	20
Steel	0.0	10	+4.9	20
Cast Iron	+1.9	10	+7.6	20
Aluminium	5.1	15	+13.1	60

1. Weight loss per coupon in milligrams

2. Aluminium radiator results

ASTM Test Procedure	Test Results <sup>1</sup>	Specification
D4340-89 Heat Rejecting Aluminium Corrosion	0.1 mg/cm <sup>2</sup> /week	1.0 maximum
D2809-94 Aluminium Water Pump Cavitation-Erosion Corrosion (rating from 1 to 10)	9	8 minimum

1. Weight loss per coupon in milligrams

### Health, Safety and Environment

**Guidance on Health and Safety** is available on the appropriate Safety Data Sheet, which can be obtained from the Viva Energy Technical Help Desk.

**Precautions for safe handling.** Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a wellventilated area. Ensure that the workplace is well ventilated.

**Avoid contact with skin.** If skin contact occurs, remove contaminated clothing and wash skin with water.

**Storage requirements.** Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidisers..

**Protect the environment.** Ensure waste disposal conforms to local waste disposal regulations. Do not empty into drains.

**Storage requirements.** Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidisers.

**Shelf life.** Extended shelf life stability (5 years); no possibility of silicate drop-out or gel formation

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### Specifications / Approvals

Meets or exceeds the performance requirements of the following engine coolant specifications:

OEM / Agency	Specification
ASTM	D-3306 / D-4985
AS/NZS	2108:2004 'Type B'
SAE	J1034 / J1941

Note: Because use conditions and applicable laws may differ from one location to another and may change with time, the end user is responsible for determining whether products and the information in this document is appropriate for their use and for ensuring that their workplace and disposal practices are in compliance with applicable laws and other governmental enactments. It is the responsibility of the end user to determine product suitability as recommended in the Owner's Manual and to follow engine manufacturer's instructions.

For further information regarding equipment approvals and recommendations contact the Viva Energy Technical Help Desk.

### Typical Physical & Chemical Characteristics – Pre-Mix

Properties	Performance	Test Methods
pH	7.5 – 9.0	ASTM D-1287
Specific gravity (15.6°C/60°F)	1.01 to 1.02	ASTM D-1122
Foam Volume (mL)	50 max.	ASTM D-1881
Foam Break time (sec)	5 max.	ASTM D-1881
Ash content (wt. %)	5 max.	ASTM D-1119
Odour	Characteristic	
Colour	Red	
Total Glycols (wt. %)	0%	
Chloride (ppm)	25 max.	ASTM D - 3634
Silicon (ppm)	< 10	
Boron (ppm)	< 10	
Phosphorous (ppm)	< 10	

These characteristics are typical of current production. Whilst future production will conform to Viva Energy's specification, variations in these characteristics may occur.

### Technical Help Desk

Phone	1300 134 205
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