

**GRScientific**

Conforms to ASTM/EN/ISO Standards



# Aquamax KF *Oil Evaporator*

*The Petroleum Evaporator*

## Aquamax KF Oil Evaporator

The Aquamax KF Oil Evaporator model 51000 has been designed as a “stand-alone” unit so that it can be used in conjunction with most leading models of coulometric and volumetric Karl Fischer titrators and to comply with the requirements of ASTM method D6304, “Standard test method for determination of water in petroleum products, lubricating oils and additives by Coulometric Karl Fischer titration”. It is important to know the water content of lubricating oils, additives and similar samples to enable accurate prediction of performance and quality. The presence of water in such samples could lead to corrosion and wear of machinery and reduce the effectiveness of the lubricating additives.

*The oven temperature can be adjusted from ambient to 200°C and a digital carrier gas flow setting of 300 ml per minute.*



Adjusting carrier gas flow



Setting temperature

## Methodology

To conform to ASTM D6304 procedure C, 5 grams sample is made up to 10 ml with dried hexane, shaken until dissolved, and then a 1.0 ml aliquot is injected into the base oil of the oil evaporator. The liberated moisture is transferred into the titration vessel by the carrier gas where it is titrated coulometrically.



## Technical Specifications

Heater type:	Silcon mat heater
Temperature range:	Ambient to 200°C
Temperature control:	Digital setting
Gas flow control:	Digital setting
Carrier gas:	Nitrogen gas (not supplied)
Desiccant:	Molecular sieve
Power supply:	24VDC, 100-240 VAC, 50-60 Hz
Dimensions:	18 x 24 x 21 cm
Weight:	3 Kg

## Ordering Information

Part No.	Product
510000	Aquamax KF Oil Evaporator
401528	Mains Power Pack
503070	Molecular Sieve
503086	Glass Vessel with 10ml line
503087	Vessel Lid c/w red compression, "O" rings and fittings, knurled edging
503088	Red Compression Fittings (pack 4)
503089	Injection Septa, 8mm (pack 20)
503091	Vessel Gas Distribution Tube
503092	Pack 1 Large & 3 Small "O" ring
503093	Gas Inlet Tube with 3 Way Cock, connection to titration vessel
503094	Gas Outlet Tube, connection to titration vessel
503095	Desiccant Bottle
503097	Thermocouple K-Type
503098	Pack 4 Plastic Tubes
503099	Base Oil, 1 Litre (Mineral Oil)
503100	Silicone Grease (Tube)



## About G.R. Scientific

Key personnel at G.R. Scientific are recognised experts in titration technology and electrochemistry. They have designed and manufactured titrators since the early 1980's and are widely regarded as some of the leading specialists in this technology.

## Certificates

All Aquamax KF Coulometric titrators are supplied with a calibration certificate traceable to national standards

For additional technical information, specifications, MSDS data, user manuals, and exhibition news, visit our website at: [www.grscientific.com](http://www.grscientific.com)

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