



NEW
2 SIMULTANEOUS
LIQUID
CHANNELS

LIQMIX™ NEPHOS

From liquids, generate your gaseous mixtures at the desired concentrations.

Some applications require gas mixtures or standards that are not commercially available in cylinders. LIQMIX™ NEPHOS, developed by AlyTech, is a dynamic system that custom generates these standard gases from pure liquids or mixtures of liquids. The instrument vaporizes the liquid phase in a gas stream, generating a custom gas standard, of multiple concentrations and in a faithful and accurate manner. The production of a standard gas then benefits from full traceability and quality monitoring thanks to the associated software.

The software, developed by AlyTech, allows you to create sequences, to have quality monitoring and can be synchronized with third-party instruments such as GC, a spectrometer, a preconcentrator, a gas analyser, or any other instrument.

ADVANTAGES:

- Create a standard gas from one or more gases, one or two pure liquids or mixtures of liquids. **NEW**
- Complies with ISO 6145-7.
- Designed to evolve: easy to add liquid or gas channels. **NEW**
- Mixing of 2 liquid channels simultaneously. **NEW**
- Automatic management of liquid supply and rinsing phases **NEW**
- Generate a wide range of concentrations from ppb to %.
- New software dedicated to the LiqMix™ nephos allowing to perform all the calculations and to have a quality follow-up and a traceability of the tests.
- Create, store and plot complex sequences.
- The complete automation of the system saves significant operator time.
- Robust design, simple maintenance and use.
- All our appliances are treated with "Sulfinert" to reduce the risk of corrosion.

LiqMix™ is THE solution to prepare custom gas standards and complex mixtures automatically and inexpensively from reactive or unstable compounds. LiqMix™ is a simple and effective tool for performing multi-point calibrations, linearity, hysteresis checks, LOD/LOQ validations, creating a controlled atmosphere and more.



A smart, scalable instrument that mixes and dilute vaporized liquids and gases over a wide range of concentrations from ppb to %.

The operating principle of LiqMix™ is based on the proven technology of mass flow controllers (MFC) for gases and Coriolis for liquids. These MFCs are factory calibrated using NIST-traceable procedures. The Coriolis flowmeter can handle all kinds of liquids, pure or in solution, regardless of the conditions of its environment (temperature, pressure, density, conductivity and viscosity). The vaporization temperature is controlled by the software.

The liquid phase, thus vaporized, is pushed by a vector gas. This gas stream can be further diluted and/or mixed with other gases (up to 4 additional channels possible) and/or a second vaporized liquid. It is then possible to generate complex mixtures over a very wide range of concentrations with many compounds.

The gas lines are heated in order to avoid any point of re-condensation and to maintain the whole in the gaseous state until the point of delivery.

NEW
2 SIMULTANEOUS
LIQUID
CHANNELS



TECHNICAL SPECIFICATIONS

- Number of liquid channels: 1 or 2
- Coriolis type mass flow meter, 0.5-5g/h; 0.5-200g/h
- Liquids: Pure liquids or mixtures of liquids (eg water, organic solvents) without particles, traces of polymerization or formation of salts.
- Number of gas channels : 1 to 6
- Gas pressure: stable at a value between 3 and 8 bars(g)
- Gas compatibility: Pure gases, mixtures of concentrated gases, most aggressive gases used in industry and research (contact us if specific gases).
- Dilution factor compared to the initial concentration: up to 10^8
- Accuracy of the output flow: less than 2% of the measured flow.
- Output concentration accuracy: <1%
- 1m heated line at the output, as standard; other lengths are possible.
- Outlet gas pressure: atmospheric pressure; higher pressure is possible.
- Connectors: Swagelok 1/8", 1/16" and 1/4".
- Tank for liquids (optional), to be pressurized with inert gas.
- Software: PC with Windows 10, or higher. Ethernet communications port.
- Power supply: 90-260Vac, 1.5-4A, 50-60Hz
- Dimensions: LxWxH 50x47x58 cm
- Weight: 25 kg - 40 kg (varies depending on configuration)

* Note: Specifications subject to change without notice

