QGO-M XLPD

Innovative Technology

Rapid Microbial Detection in minutes

APPLICATIONS

- → Latex
- → Admixtures
- → Emulsions
- → Polymers
- → Personal care products

MEASUREMENT OF TOTAL FLORA BY ATP 2G©

RECOMMENDATIONS

Video demonstration and more information about applications of the QGO-M xlpd kit are available on **www.aqua-tools.com**

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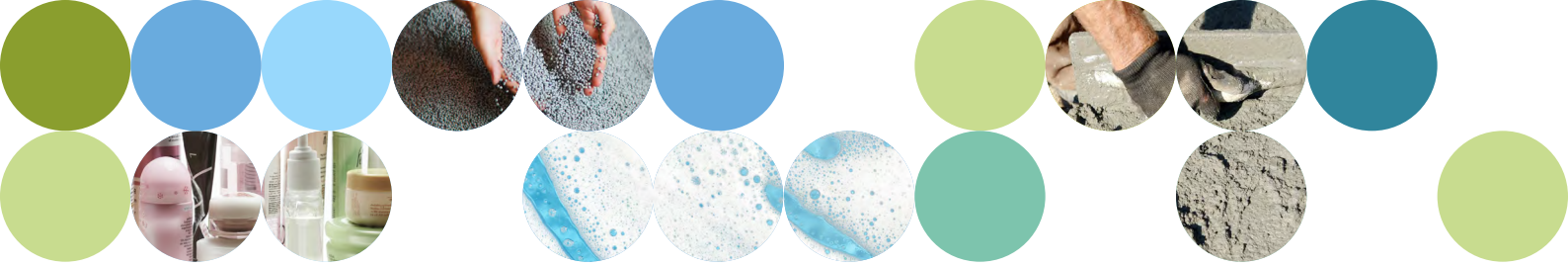

What does ATP 2G©?

The **QGO-M XLPD 2G© refill Kit** is the only one providing an **interference free** and highly sensitive measurement of all living microorganisms **in organic samples containing inhibitors and/or being difficult to filter.**

Quantitative ATP-metry is recommended for **microbial risk monitoring** as a biological tool of water quality assessment.
It's a **biological indicator tool**. It accounts for all living organisms present, isn't influenced by inorganic particulates, provides accurate bacteria counts, and detects bacteria considered to be unculturable. Adenosine triphosphate (ATP) is the energy source of any living organisms. ATP 2G© analysis is an **effective tool in monitoring microorganisms in water** and detects **all metabolically active cells** in the sample. This kit is new alternative method from culture plate counting, for more reactivity.

Technology

Adenosine Triphosphate (ATP) is the main energy carrier for all living cells. Thus, measuring the concentration of ATP in living cells enables to quantify the microbial contamination in a sample.
The **QGO-M XLPD kit** – 2nd generation ATP-metry – allows measuring only intracellular ATP for quantifying living microorganisms in emulsions in 5 minutes. Living microorganisms are retained on a filter and organic compounds are washed off. Microorganisms are then lysed to release their ATP. With luciferin and luciferase, ATP reacts to produce photons measured by a luminometer. Results are expressed in RLU and then converted either in pg ATP/mL or Equivalent Microorganisms/mL using an external **standard calibrated ATP solution, Ultracheck™ 1**, to provide reliable quantitative results over time.

Key benefits

Microbial growth in highly viscous organic samples can present a major problem. If left unchecked, microbial contamination in raw materials and intermediate products can compromise manufacturing process performance and equipment integrity. These same sources can also impact final product quality, which if not properly maintained can spoil products while sitting on the shelf. The best solution is early, accurate detection for proactive rather than reactive treatment.
The QGO-M XLPD kit allows monitoring microbial contamination in organic based latex/polymer emulsions, admixtures, personal care products:

- Control and handle microbial contamination in real –time from raw material to finished products
- Early detect and prevent related damages such as degradation of finished products
- Assess in real-time the effectiveness of corrective action

Strong points

- **Quick measurment** in minutes
- **Quantitative sample** transfer ensures accuracy
- **Higher volume analyzed** – More representative
- **Filtration step** to concentrate microorganisms and eliminate extracellular ATP
- **Superior chemistry of reagent**s – higher ATP extract recovery
- **Optimized protocols** ensure minimal interferences (TDS, TSS, Oil, Biocides)
- **Liquid-stable ATP standard** (UltraCheck 1) converts RLU to quantitative concentration

Added value ATP 2G©

- **Account greatest number of microorganisms**
- **In an acceptable time frame**
- **At a reasonable cost**
- **More reliable, robust**
- **More reproductible and relevant**

Create your Microbial ToolBox

Reference method as culture plate count for water/fluid microbial control are directly link to the operator appreciation and quality of culture media used - variation of CFU count are more than 30 % for the same of culture media produced by different companies.

This means that **you can underestimate true level of microorganisms** in your sample – Microorganisms slow growing or **injured active** cells will be missed by the operator. Underestimation of microbial contamination could lead you to unappropriated and non-efficiency action plans.

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