



FOR IMMEDIATE RELEASE

**Mathis Instruments Announces the publication of a New USP General Information Chapter on “Effusivity”**

July 29<sup>th</sup>, 2004, Rockville, MD and Fredericton NB - The U S Pharmacopeia (USP) has just published an In-Process Revision Chapter <1073> Effusivity in *USP PF 30(4)*. This chapter describes and discusses Effusivity - a thermal property inherent in materials of all formats-solids, liquids, pastes and powders.

Already in use by several major pharmaceutical companies, this technology has been gaining acceptance by the industry for various applications including material characterization, blend uniformity monitoring as well as for end-point determination of the granulation and drying processes. Results are available in real-time and the technology can be instrumental for pharmaceutical R&D, formulation, process development and as a tool for process monitoring or Process Analytical Technologies (PAT).

“We are extremely pleased of the receptiveness that USP has demonstrated toward consideration of technologies that are non-traditional to the Pharmaceutical Industry”, says Nancy Mathis, President and CEO of Mathis Instruments Ltd.

This is viewed as an important step by industry. “PAT requires a variety of tools to be applied to the generation of information relevant to enhancing process understanding. This chapter will promote discussion on the application areas for effusivity in a PAT environment”, says Glenys Foster Roberts, Senior Director QC at Barr Labs.

To access the USP General Information Chapter <1073> “Effusivity” on-line, visit the Mathis Instruments website at [www.MathisInstruments.com](http://www.MathisInstruments.com). "Publishing the chapter in the Pharmacopeial Forum is done to stimulate comments from the industry. In addition, USP is researching the technology currently to determine feasibility for generating values for commonly used materials and USP reference materials", says Gary Ritchie, Scientific Fellow for PAT, U.S. Pharmacopeia. "We are delighted to have the opportunity to work first hand with new technology like Effusivity and we see this as a way to keep USP current as well, so when the industry is ready to adopt it, USP will be ready also” Gary added.

**About Mathis Instruments**

Established in 1995 and based in Fredericton, NB, Mathis Instruments Ltd. has developed an innovative technology to provide sensor solutions for the Process Analytical Technology (PAT) industry. The Mathis technology uses thermal effusivity to evaluate, monitor and control the uniformity of powders, liquids and creams in real time. Already in use by several major pharmaceutical companies, the Mathis technology is designed for material handling and processing environments, specifically: blend uniformity, wet granulation, separation kinetics, emulsion stability, drying and lubrication monitoring.

## **About United States Pharmacopeia (USP)**

The US Pharmacopeia is also supportive of the PAT initiatives. With the adoption of PAT practices and ASTM standards by the pharmaceutical industry, new technologies will emerge on the horizon. USP introduces new technologies to the pharmaceutical community through their Council of Experts and communicates with stakeholders and interested parties through the Pharmacopeial Forum. USP has been performing this function for the pharmaceutical industry for 184 years. The USP general chapter <1073> Effusivity appeared in PF 30(4) in July/August 2004 and it will be the second example of a PAT system chapter in the USP Chapters <643>. TOC for USP Purified Water (PW) and <645> Conductivity for Water for Injection (WFI) first appeared in 1997.

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For more information about USP visit [www.usp.org](http://www.usp.org).