


MRT- Latexometer


 Award Winner


Microwave Reflection Type Latexometer is a specialized instrument for rapid measurement of dry rubber content (DRC) in the field rubber latex and latex concentrate. Applying microwave technology, the meter has been indirectly calibrated between actual DRC (or moisture content) by standard laboratory method and the output current of the meter, which represent the reflected microwave signal from the sample. With proper calibration this instrument is suitable for determination of moisture content (MC) or solid content in various lossy liquids, including fresh milk, coconut milk, soya sauce, tomato ketchup and water-based paint. The operator just fills the cup with the liquid and the percentage of DRC or moisture content is instantaneously shown on the meter display.

The dynamic range of the instrument is 0-60 % unit DRC, with accuracy of $\pm 1\%$ and 40-100% unit MC with the accuracy of $\pm 0.5\%$. The whole process of the measurement takes less than 5 minutes. Meter of this kind is suitable to be used at latex collecting centre for transaction process and process control at latex dipping industries. Although latexometer is still at the prototype stage, 30 units of this product has already been used by various agencies such as Rubber Research Institute, MINTS, Rubberflex and RISDA for quality assessment and field-testing. This product was patented in Malaysia (MY-106441-A) in 1995 under the title " Apparatus and Method for the determination of DRC of hevea latex" and awarded first prize in the Malaysian Invention and Design Competition (General Technology category) in 1990.



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