

# Nano drops from the one-way pack

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## *New dispenser system made of plastic reduces costs for use of micro dispensers*

A two-component micro dispenser system developed at the Institut für Mikrotechnik Mainz GmbH (IMM) produces [nano](#) drops from a liquid-feeding disposable module. Time-consuming washing and filling procedures of conventional dispensers are no longer necessary since the one-way module is exchanged after each usage.

Depending on the application field, it can be filled with adhesives, lubricants or biochemical reagents. Made of inexpensive plastic materials, the module is designed for use in large numbers. The aim is to cost-efficiently apply the micro dispenser in industrial analytics or in manufacturing technology.

The micro dispenser consists of a recyclable basic module whose actuators and piezo-electronic dispensing device are covered with a metal housing. An adapted plastic module functions as liquid-feeding one-way component. It can, if necessary, be repeatedly used thanks to a fillable storage chamber.

The micro dispenser produces single drops or series with high frequencies of up to one thousand drops per second ( $> 1$  kilohertz, kHz). The measurable volume ranges from one to twenty nanolitres.

Source: Institut für Mikrotechnik Mainz IMM GmbH

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