

NISTTech

Volatile Component Infused Polymer as Vapor Generator for Testing Analytical Instruments and Training Canines for Vapor Detection

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Abstract

The reliable generation of chemical vapors is critical to a wide variety of measurements. The detection of terrorist bombs, drugs-of-abuse, and formaldehyde in buildings are examples where vapor sensing (either with electronic detectors or trained canines) may be optimized through the use of a vapor generator. Although there are devices for vapors generation with air flow, these are not useful in still air and require prior knowledge of the volatile components of a test sample. The "infused" polymer may be fabricated by absorbing the vapor components in still air. When used with a defined orifice, the design results in a uniform release of vapors for time periods of 3 days in still air. The approach provides authentic vapors without the need for the use of bulk toxic/controlled/hazardous substances.

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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