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Development of a sensitive, generic and easy to use

organophosphate skin disclosure kit

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Highlights

> We developed an easy-to-use organophosphate skin disclosure kit.

> The kit is highly sensitive, generic, rapid, of small dimension and weight.

> The kit allowed the detection of low concentrations of the nerve agent VX (200 ng) on rat skin.

>The kit enables the early diagnosis of skin exposure by (persistent)

organophosphates.

Abstract

Various organophosphorus compounds (OP), primarily the nerve agent VX and

other V-agents, are highly toxic to humans after skin exposure. Percutaneous

exposure by such OP results in a delayed onset of toxic signs which enables

the initiation of specific countermeasures if contamination is detected rapidly.

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