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Chemical profiling of the street cocktail drug 'Nyaope' in South Africa using GC-MS I : Stability studies of components of 'Nyaope' in organic solvents

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Highlights

- Nyaope, is a major drug of abuse unique to South Africa
- The major components of nyaope are, cannabis, heroin and antiretrovirals.
- Major components, in combination, are more stable in *t*-butanol for up to 72 hours.
- Chemical profiling of the major components of nyaope using GC-MS is possible.

Abstract: Abstract

Nyaope, a street drug commonly found in South Africa, is a mixture of low grade heroin, cannabis products, antiretroviral drugs and other materials added as cutting agents. It is a highly physiologically addictive substance which is smoked by users. Little work has been published on the chemical analysis and profiling of nyaope. Sample preparation prior to chromatographic or spectrometric analysis normally involves dissolution of the sample in an organic solvent. This study determined the most suitable organic solvent in which the common components of nyaope, namely Δ 9-tetrahydrocannabinol, diamorphine, caffeine, dextromethorphan, phenacetin and the antiretrovirals efavirenz and nevirapine, which have different chemical characteristics, are stable

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