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## DETECTION OF ZOLPIDEM IN SPIKED DRINKS USING HIGH PERFORMANCE THIN LAYER LIQUID CHROMATOGRAPHY

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### ABSTRACT

*An elite fluid chromatographic interaction with brilliant recognition for simultaneous examination of certain benzodiazepines (BZDs) is developed for legal screening of tainted non-cocktails. The cases were examined following a required cycle of pH correction and separation. It was done at 45°C with a variable advance of 15mM phosphate support: methanol (50:50 v/v) at a stream rate of 1.4 mL/min on a C18 segment (250 mm × 4.6 mm, 5μ). An Ultra Violet (UV) detector tuned to 245 nm was used to evaluate the column eluent. The eluting peaks were promptly discovered, recognized, and measured as a consequence of this. Calibration curves for all medicines in the 0.510 μg/mL range with a linear regression coefficient higher than 0.996. The BZDs showed recovery rates that varied from 93.7 to 108.7 percent. In addition, the detection limits were 0.03-0.05 g/mL. The detection limits were found to be between 0.01 and 0.02 μg/mL. For all BZDs at all focuses in the range of 0.45 to 7.69 percent, the coefficients of differentiation within and between days were resolved. The technique will offer an unmistakable, responsive, and fast way for screening six BZDs in contaminated sodas in legal assessment.*

**KEYWORDS:** Alcohol, Analysis, Benzodiazepines, Chromatography, Effects, Samples, Whiskey Cream, Zolpidem.

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