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PUBLIC ALERT

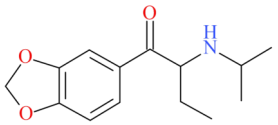
NOV 2025

NEW SYNTHETIC CATHINONE *N*-ISOPROPYL BUTYLONE EXHIBITING INCREASED IDENTIFICATIONS IN FORENSIC SAMPLES IN THE U.S.

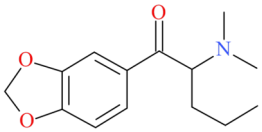
PURPOSE: The objective of this *Public Alert* is to notify public health and safety, clinicians, medical examiners and coroners, forensic laboratory personnel, and related professionals about new information surrounding the emergent novel synthetic cathinone ***N*-isopropyl butylone** (NiPB).

BACKGROUND: Synthetic stimulants are chemically manufactured drugs with sub-classifications based on their structural relation to amphetamine or cathinone. Synthetic stimulants, including substituted cathinone analogues (e.g., methylone, mephedrone, alpha-PVP), can retain both stimulant and hallucinogenic properties, and can cause associated negative health risks. Synthetic stimulants are often prepared and distributed in powder, capsule, or tablet form, and may be sold as "Ecstasy", "Molly", or "MDMA" (3,4-methylenedioxymethamphetamine) on recreational drug markets. In the United States (U.S.), synthetic stimulants have been associated with adverse effects and linked to cardiac effects resulting in death. Adverse effects can include hyperthermia, dehydration, arrhythmias, hallucinations, and serotonin syndrome.

***N*-ISOPROPYL BUTYLONE**



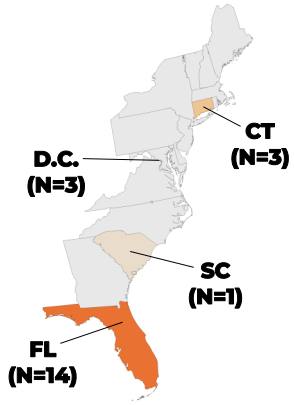
***N,N*-DIMETHYLPENTYLONE**



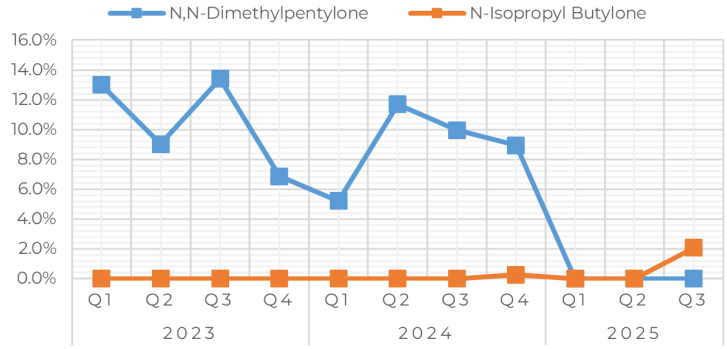
SUMMARY: *N*-Isopropyl butylone is an unscheduled, novel synthetic cathinone analogue bearing structural resemblance to multiple beta-keto methylenedioxyamphetamines ("-ylones"), including ***N*-ethyl pentylone**, *N,N*-dimethylpentylone, and *N*-propyl butylone. ***N,N*-Dimethylpentylone** was placed under control by the World Health Organization in December 2024 and by the U.S. Drug Enforcement Administration in August 2025. As a result, its positivity has decreased over the last year as that of *N*-isopropyl butylone has increased as a replacement in the illicit drug market.

N-Isopropyl butylone was first identified by our laboratory in August 2024 in a drug material submitted from Georgia. Since then, *N*-Isopropyl butylone has been detected in more than 40 forensic samples, including 21 toxicological specimens from fatal and non-fatal overdoses, primarily from Florida. More than half of the cases were polydrug intoxications, testing positive for other drugs such as cocaine, methamphetamine, and fentanyl. Additional NPS detected included *N,N*-dimethylpentylone, **alpha-PiHpP** (also known as iso-PV8), bromazolam, and **2F-2oxo-PCE**. Our laboratory received 18 postmortem and 3 antemortem specimens. Age ranged from approximately 25 to 60 years, when provided. The toxicity of *N*-isopropyl butylone has not been formally examined but recent associations with intoxication and death lead professionals to believe that this drug has the potential to cause harm and is of high public health concern, when mixed with other drugs or when consumed alone at high doses.

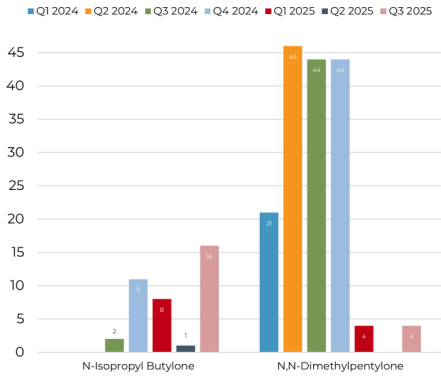
DISTRIBUTION



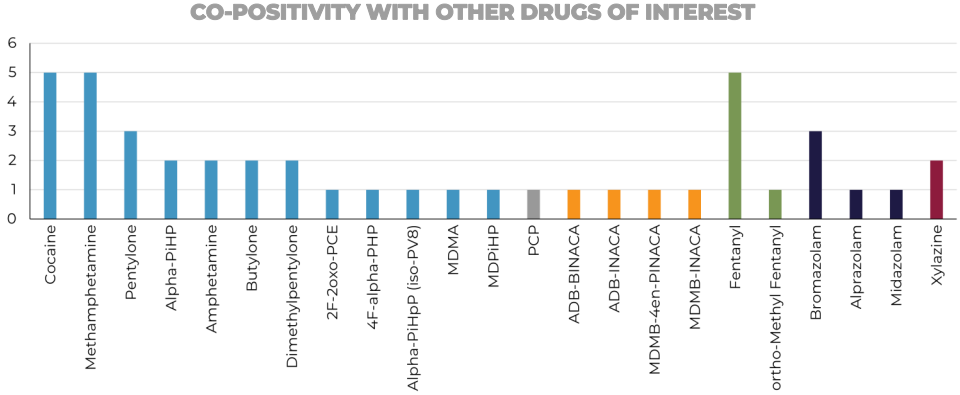
TRENDING: *N*-ISOPROPYL BUTYLONE VS. *N,N*-DIMETHYLPENTYLONE



Note: *The above line plot illustrates percent positivity in a forensic toxicology sample population analyzed consistently since 2018.*



RECENT TOXICOLOGY SPECIMENS (N=21) CONTAINING *N*-ISOPROPYL BUTYLONE



NiPB CONCENTRATIONS (NG/ML)			
MATRIX	BLOOD	URINE	VITREOUS
N	18	1	1
Mean±SD	210 ± 380	2,200	17
Median	57	N/A	N/A
Range	<0.1 - 1,400	N/A	N/A

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