

MITRAGYNINE & 7-HYDROXY MITRAGYNINE

TEST
PURCHASE

MAY
2026

PURPOSE: The objective of this report is to detail our findings from forensic testing of Mitragynine (MG) and 7-Hydroxy Mitragynine (7OH) marketed products for notification to public health, public safety, clinicians, medical examiners, coroners, forensic laboratories, and other related communities regarding this emerging topic.

BACKGROUND: Mitragynine is a plant alkaloid and the primary psychoactive component of Kratom (*Mitragyna speciosa*). 7-Hydroxy mitragynine is a structurally similar alkaloid found naturally in Kratom but in smaller amounts. Recreational uses of Kratom date back centuries, with consumption in Southeast Asia by laborers and

farmers looking to combat fatigue, increase productivity, and alleviate pain. Kratom can be prepared in many forms, including dried leaf, brewed tea, powders, capsules, concentrates, and extracts. In recent years, concurrent with the rise of smoke shops, commercial sale of Kratom products, high dose mitragynine preparations, and now marketed 7-hydroxy mitragynine and mitragynine pseudoindoxyl (MP) products have surged. These marketed products include chewable tablets, concentrates, extracts, edible materials (e.g., gummies, ice cream cones), and beverages, with highly elevated (or enhanced) 7-hydroxy mitragynine and/or mitragynine pseudoindoxyl contents compared to Kratom products.

Mitragynine is a pharmacologically complex drug, exhibiting stimulant-like effects at low doses and sedative effects at higher doses. Mitragynine is metabolized to 7-hydroxy mitragynine and further to mitragynine pseudoindoxyl; however, the *in vivo* presence of these alkaloids is often unclear as both can arise from Kratom use itself or individual use of the substances in enhanced products. 7-Hydroxy mitragynine and mitragynine pseudoindoxyl are reportedly more potent than mitragynine, on the order of 10x and 100x, respectively. Testing for these two alkaloids is extremely limited based on published reports, and, of note, 7-hydroxy mitragynine exhibits poor stability, especially in biological matrices.



PRODUCT (LIQUID)	SERVINGS / DOSE	ADVERTISED (MG/BOTTLE)			ACTUAL (MG/BOTTLE)		
		MG	7OH	MP	MG	7OH	MP
ANALYTES >	---						
feel free	2 / 30 mL	40	<0.1		39.8	0.03	-
EDP BUZZZ	2 / 15 mL	25	-		>150	-	36.7
PRODUCT (TABLETS)	SERVINGS / DOSE	ADVERTISED (MG/TABLET)			ACTUAL (MG/TABLET)		
OPIA Wild Berry	8 / half tablet	-	20		0.15	13.7	1.4
Kream OHMZ	8 / half tablet	70	25	5	28.9	21.2	1.1
eat OHMZ (Red)	8 / half tablet	-	18	-	-	19.6	0.3
eat OHMZ (White)	8 / half tablet	-	25		-	21.6	0.3
edp 7OH	6 / half tablet	-	20	-	0.7	19.2	1.4