



**Euphorinol (EPN) – The Super Sativa is Now Available! A breakthrough compound—engineered for potency, clarity, and next-level euphoria— is here.**

Why EPN is a game-changer:

- Super Powerful! – Just 1.5% – 2% needed for a full effect
- Rapid onset – Effects begin in 5 min and take full effect in 20 – 30 minutes
- Unmatched euphoria – No anxiety, no paranoia—just pure elevation
- No reported tolerance buildup – no reported diminishing returns
- Potentially amplifies other cannabinoids – Unlocks synergies for optimized blends
- 100% hemp-bill compliant, legal, and patent-protected

EPN isn't just another cannabinoid—it's the next evolution of the industry. Supply is limited. The biggest players are already moving. Don't get left behind.

EPN OIL WHOLESALE PRICING				1/2 Gram - EPN Vape Pricing		
Gram Pricing	2%	3%		Tiers	2%	3%
10 (MOQ)	\$8	\$10		1-100	\$13.00	\$16.00
50g	\$7	\$9		100-500	\$12.85	\$15.85
100g	\$6	\$8		1000	\$12.50	\$15.50
500g	\$5	\$7		5,000	\$12.15	\$15.15
Kg Pricing	2%	3%		10,000	\$11.96	\$14.96
1 kg	\$4,500	\$5,850		25,000	\$11.87	\$14.87
10 kg	\$4,400	\$5,750		50,000	\$11.55	\$14.55
25 kg	\$4,300	\$5,650		100,000	Call for Quote	Call for Quote
50 kg	\$4,200	\$5,550		1 Gram - EPN Vape Pricing		
100 kg	\$4,100	\$5,450		Tiers	2%	3%
250 kg	\$4,000	\$5,350		50/100	\$15.00	\$18.00
500+ kg	Need Quote	Need Quote		500	\$14.50	\$17.50
				1000	\$14.00	\$17.00
EPN Gummy Pricing				5,000	\$13.50	\$16.50
Tiers	Order	Price per		10,000	\$13.00	\$16.00
Tier 1	1,000 – 4,999	\$1.10		25,000	\$12.50	\$15.50
Tier 2	5,000 – 19,999	\$1.05		50,000	\$12.00	\$15.00
Tier 3	20,000 – 49,999	\$1.00		100,000	Call for Quote	Call for Quote
Tier 4	50,000 – 99,999	\$0.95		2 Gram - EPN Vape Pricing		
Tier 5	100,000+	\$0.90		Tiers	2%	3%
				50/100	\$25.00	\$28.00
EPN Flower Pricing				500	\$24.50	\$27.50
				1000	\$24.00	\$27.00
Indoor Flower	Per lb	\$1,625.00		5,000	\$23.50	\$26.50
Indoor Flower	2g Pack	\$12.00		10,000	\$23.00	\$26.00
Outdoor	Per lb	\$900.00		25,000	\$22.50	\$25.50
Outdoor	2g Pack	\$8.00		50,000	\$22.00	\$25.00
				100,000	Call for Quote	Call for Quote

# WHITE PAPER

## NEW CANNABINOID DISCOVERY: EPN: The New "Super Sativa" Cannabinoid, Redefining What's Possible in Hemp

### EPN / EUPHORINOL

**Introduction:** The cannabinoid industry is experiencing a seismic shift with the introduction of EPN – The **Super Sativa**. Unlike any cannabinoid currently available, EPN delivers a euphoric, uplifting experience without THC, THCP, HHC, or any traditional analogs. This white paper explores EPN's unique properties, benefits, and potential applications, positioning it as a groundbreaking advancement in the hemp-derived cannabinoid market.

#### What is EPN?

EPN is a groundbreaking, newly discovered hemp-derived **Super Sativa** — a semi-synthetic cannabinoid engineered for unmatched potency and functionality. Unlike anything seen before, it delivers pure euphoria, **Sativa-like** mental clarity, and an elevated sense of wellbeing. Through cutting-edge science, we have isolated a novel cannabinoid from hemp and made precise, semisynthetic refinements to enhance its effects. The result? A cannabinoid experience unlike anything in the world—designed for those who have been searching for the perfect, functional, **Sativa-like** experience the hemp industry has to offer.

#### Key Benefits & Properties

- **Super Potent:** Only 1.5% - 2% EPN is needed for effective vape formulations.
- **Sativa-like Euphoria-Inducing:** A pleasant, uplifting experience with no anxiety or paranoia.
- **No Known Tolerance Buildup:** Unlike THC-based compounds, effects remain consistent over time.
- **Medium-Onset, Moderate Duration:** Effects kick in within 10 - 30 minutes, last 3-4 hours, and leave no next-day grogginess.

- **Potentially Enhances Other Cannabinoids:** EPN potentially amplifies the effects of other cannabinoids and compounds in blended formulations.
- **Functional & Sativa-like Non-Sedating:** Majority of users remain clear-headed, productive, and socially engaged. No couch-lock. Users can go to work and be fully functional!
- **Safe & Non-overwhelming when used as directed:** Not a full agonist.

### **How EPN Stands Apart from Other Cannabinoids:**

Traditional cannabinoids often have limitations: THC causes impairment, THCP builds tolerance, and HHC provides severe brain fog and inconsistent effects.

**Super-Sativa**-like-EPN, however, is a game-changer. It delivers a predictable, controlled experience that works for both new and experienced users without the pitfalls of traditional cannabinoids.

### **Applications & Market Potential EPN is available in multiple product forms, including:**

- Vape Fluids
- Edibles & Gummies
- Mouth Strips & Tinctures
- Beverages

With a patent-protected structure and formulation and an MSDS available under an NDA, EPN is positioned as the next major innovation in the hemp industry. Early adopters will have a significant market advantage as demand for **Sativa**-level functioning cannabinoids increases.

### **Supply & Business Model**

**Limited Supply:** Initial inventory includes wholesale CRD EPN, KG blends of 2% EPN distillates, as well as vape products, gummies, and tinctures. Supply is capped at 10 kg for the first three weeks, with a planned 10x monthly increase to meet demand. Orders are fulfilled on a first-come, first-served basis, with priority given to those securing their position with a 50% deposit and the remaining balance due upon shipping. After 90 days, specialty blends turnaround is scheduled to be available with a 24-hour turnaround. **EPN is not sold in the concentrated form.** Our facility will blend any legal medium sourced through our supply chain channels.

# **Euphorinol (EPN): “Tetrahydromethylisopentyl-ethylcannabinol”**

## **A Novel Cannabinoid with Sativa-Selective Pharmacology**

Abstract Euphorinol (EPN) represents a breakthrough in cannabinoid technology, offering a Sativa-selective pharmacological profile. Unlike conventional cannabinoids, EPN delivers a functional, clear-headed euphoric “Sativa”-like effect. This contrasts with the classic behavior of psychoactive cannabinoids that are notable for inducing profound Indica-like effects of lethargy, sedation, immobility, and stupor. In further contrast to classic psychoactive cannabinoids, EPN does not trigger anxiety, paranoia, and it does not lose its potency over time in frequent users. This article explores EPN’s molecular characteristics, receptor activity, pharmacokinetics, and potential applications within the cannabinoid industry.

### **Introduction**

The global cannabinoid market is evolving rapidly, with increasing demand for compounds that provide predictable, repeatable, and functional psychoactive effects. Whereas  $\Delta^9$ -THC, THCP, and HHC exhibit varied binding affinities to the classic CB1 and CB2 receptors, these agents often produce sedation, disorientation, anxiety, and increased tolerance with repeated use. EPN now is introducing a new class of semi-synthetic cannabinoids that selectively engage CB1 receptor pathways associated with euphoria and mental clarity while minimizing depressant effects traditionally linked to THC-based analogs.

### **Pharmacological Properties of Euphorinol (EPN)**

#### **1. Selective CB1/CB2 Modulation**

EPN’s molecular structure favors biased CB1 receptor activation, promoting dopaminergic signaling without triggering pathways associated with lethargy or impaired motor function. The molecular basis for Sativa-biased downstream signaling may be secondary to altered beta-arrestin activation, as compared to Indica-like agonists such as  $\Delta^9$ -THC, THCP, and HHC. The mechanistic basis driving EPN’s bias towards Sativa signaling and away from Indica signaling is under active investigation.

#### **2. Stability and Tolerance Resistance**

Unlike THCP, which exhibits rapid tolerance buildup, EPN’s interaction with CB1 receptors and downstream signaling, remains stable over repeated dosing, ensuring consistent efficacy over time.

#### **3. Pharmacokinetics and Duration**

Onset: 10-30 minutes post-inhalation, 15-30 minutes post oral ingestion

Peak effects: 1-2 hours

Duration: 3-4 hours, with no residual grogginess.

Potency: strong activity after inhalation of 5-10 puffs of a 1-2% vape or ingestion of 125 micrograms in an oral tincture

#### 4.Synergistic Potential

EPN exhibits enhanced cannabinoid synergy, potentially augmenting the effects of other cannabinoids in blended formulations.

##### A Novel Approach to Cannabinoid Therapeutics

Current cannabinoid formulations often present challenges related to impairment, unpredictability, and adverse physiological responses. EPN's Sativa-selective pharmacology eliminates many of these concerns, making it a promising candidate for:

- Cognitive Enhancement – Supports focus and mental clarity without intoxication
- Mood Elevation – Induces euphoria without overstimulation or anxiety
- Functional Use – Enables social engagement and productivity, contrasting with traditional THC's sedative effects

Market Potential and Applications EPN is currently being introduced in vape formulations, tinctures, and gummies, with further applications in nutraceuticals, beverages, and functional wellness products. Given its patent-pending status and legal clarity, early adoption by leading cannabinoid brands presents an opportunity to establish market differentiation in the next evolution of cannabis-derived products.

Conclusion EPN represents a paradigm shift in cannabinoid pharmacology, offering a consistent, non-sedative, functional euphoria that stands apart from traditional THC analogs. With its patent-pending structure, stable receptor affinity, rapid onset of action, and absence of tolerance, EPN is positioned to become a cornerstone in the next generation of cannabis innovation.

## EUPHORINOL (EPN)

Product description: EUPHORINOL (EPN)  
Batch number: 04. 03.2025  
Sample type: extracts and hemp final products  
SFP id: V10887  
Sample received date: 2025-03-17  
Remarks: /

## Analysis ID: A11929-3

Method id: GCMS\_GC\_FID\_general\_v1.0  
Date of aquisition: 2025-03-18  
Date of processing: 2025-03-19  
Date of approval: 2025-03-27  
Remarks: /



## Assay of Main/Natural Cannabinoids

Short	Substance name	Assay	M.U.
CBG	Cannabigerol	%	1.14
CBC	Cannabichromene	28.50	0.09
CBGV	Cannabigerivarin	0.43	ND
CBDV	Cannabidivarin	ND	0.10
CBCV	Cannabichromevarin	1.66	ND
CBN	Cannabinol	ND ND	ND
CBD	Cannabidiol	40.42	1.62
Δ8-THC	Δ8-tetrahydrocannabinol	ND ND	ND
Δ9-THC	Δ9-tetrahydrocannabinol	ND ND	ND
CBV	Cannabivarin	2.67	ND
CBL	Cannabicyclol	ND ND	ND
CBE	Cannabielsoin	2.78	0.16
Δ8-THCV	Δ8-tetrahydrocannabivarin	ND	ND
Δ9-THCV	Δ9-tetrahydrocannabivarin		ND
CBT	Cannabicitran		0.17
CBDB	Cannabidibutol		ND

Method of Analysis: GC-FID (Gas Chromatography with Flame Ionization Detection) coupled with GC-MS (Gas Chromatography-Mass Spectrometry). The determined measurement uncertainty (M. U.) is always given in the same unit as specified result. LOQ = Val. quantification limit of 0.02 % (respectively 200 mg/kg). ND = Not Detected - below detection limit (lower than 0.01 % respectively 100 mg/kg).

## Assay of semisynthetic and synthetically derived cannabinoids

Short	Substance name	Assay	M.
iso-THC	$\Delta^8$ -iso-Tetrahydrocannabinol	% ND	U.
S-HHC	9S-Hexahydrocannabinol	ND ND	ND
R-HHC	9R-Hexahydrocannabinol	ND ND	ND
R-HHCP	9R-Hexahydrocannabiphorol	ND ND	ND
S-HHCP	9S-Hexahydrocannabiphorol	ND ND	ND
d9-THCP	Trans- $\Delta^9$ -tetrahydrocannabiphorol	ND ND	ND
CBDP	cannabidiphorol	ND ND	ND
RH4CBD	R-Tetrahydrocannibidiol	ND ND	ND
SH4CBD	S-Tetrahydrocannibidiol	ND ND	ND
d8-THCP	Trans- $\Delta^8$ -Tetrahydrocannabiphorol	ND ND	ND
CBND	Cannabinodiol	ND ND	ND
ciso-HHC	cis-iso-Hexahydrocannabinol	ND ND	ND
tiso-HHC	trans-iso-Hexahydrocannabinol	ND ND	ND
H2CBD	8,9-Dihydrocannabidiol	ND ND	ND
d9-THCB	$\Delta^9$ -Tetrahydrocannabibutol	ND ND	ND
9R-HHCAc	9R-Hexahydrocannabinol Acetate	ND ND	ND
$\Delta^{10}$ -THC	$\Delta^{10}$ -Tetrahydrocannabinol	ND ND	ND
CBGAc	Cannabigerol acetate	ND ND	ND
S-HHCAc	9S-Hexahydrocannabinol acetate	ND ND	ND
CBGmAc	Cannabigerol monoacetate isomer	ND ND	ND
CBNAc	Cannabinol acetate	ND ND	ND
$\Delta^9$ -THCC8	$\Delta^9$ -THC-C8	ND ND	ND
$\Delta^8$ -THCC8	$\Delta^8$ -THC-C8	ND ND	ND
CBNP	Cannabiphorol	ND ND	ND
$\Delta^3$ -THC	9(R)- $\Delta^6a$ ,10a-THC	ND ND	ND
$\Delta^7$ -THC	9(S)- $\Delta^7$ -THC		ND
$\Delta^9$ -THCH	$\Delta^9$ -THCH		ND
$\Delta^8$ -THCH	$\Delta^8$ -THCH		ND
$\Delta^9$ -THCO	$\Delta^9$ -THC Acetate		ND
$\Delta^8$ -THCO	$\Delta^8$ -THC Acetate		ND
$\Delta^9$ -THCPO	$\Delta^9$ -THCP Acetate		ND
$\Delta^8$ -THCPO	$\Delta^8$ -THCP Acetate		ND
$\Delta^8$ -THCHO	$\Delta^8$ -THCH Acetate		ND
$\Delta^9$ -THCVO	Tetrahydrocannabivarin Acetate		ND
$\Delta^8$ -THCVO	$\Delta^8$ -Tetrahydrocannabivarin Acetate		ND
$\Delta^8$ -THCBO	$\Delta^9$ -THCB Acetate		ND
S-HHCC8	9(S)-Hexahydrocannabinol-C8		ND
R-HHCC8	9(R)-Hexahydrocannabinol-C8		ND
R-HHCH	9(R)-Hexahydrocannabihexol		ND
S-HHCH	9(S)-Hexahydrocannabihexol		ND
R-HHCB	9(R)-Hexahydrocannabutol		ND
S-HHCB	9(S)-Hexahydrocannabihexol		ND
R-HHCV	9(R)-Hexahydrocannabivarin		ND
S-HHCV	9(S)-Hexahydrocannabivarin		ND
R-HHCPAc	9(R)-Hexahydrocannabiphorol Acetate		ND
S-HHCPAc	9(S)-Hexahydrocannabiphorol Acetate		ND
10H-RHHC	10(S)-hydroxy-9(R)-Hexahydrocannabinol		ND
OH-HHCP	10-hydroxy-Hexahydrocannabiphorol		ND
MCO-THC	Methyl Carbonate Tetrahydrocannabinol		ND
			ND

Method of Analysis: GC-FID (Gas Chromatography with Flame Ionization Detection) coupled with GC-MS (Gas Chromatography-Mass Spectrometry). The determined measurement uncertainty (M. U.) is always given in the same unit as specified result. LOQ = Val quantification limit of 0.02 % (respectively 200 mg/kg). ND = Not Detected - below detection limit (lower than 0.01 % respectively 100 mg/kg).



## Screening for Spice type compounds and other synthetic cannabinoids

Short	Substance name	Assay	M.
JWH018	JWH 018 CAS:209414-07-3	% ND	U.
JWH073	JWH 073 CAS:208987-48-8	ND ND	ND
JWH122	JWH 122 CAS:619294-47-2	ND ND	ND
JWH210	JWH 210 CAS:824959-81-1	ND ND	ND
JWH250	JWH 250 CAS:864445-43-2	ND ND	ND
AM2201	AM2201 CAS:335161-24-5	ND ND	ND
AM694	AM694 CAS:335161-03-0	ND ND	ND
AM1248	AM1248 CAS:335160-66-2	ND ND	ND
HU210	HU-210 CAS:112830-95-2	ND ND	ND
HU211	HU-211 CAS:112924-45-5	ND ND	ND
CP47497	(±)-CP 47,497 CAS:70434-82-1	ND ND	ND
CP55940	(±)-CP 55,940 CAS:83003-12-7	ND ND	ND
UR144	UR-144 CAS:1199943-44-6	ND ND	ND
XLR11	XLR11 CAS:1364933-54-9	ND ND	ND
AKB48	APINACA CAS:1345973-53-6	ND ND	ND
5FAKB48	5-fluoro AKB48 CAS:1400742-13-3	ND ND	ND
PB22	PB-22 CAS:1400742-17-7	ND ND	ND
5FPB22	5-fluoro PB-22 CAS:1400742-41-7	ND ND	ND
FUB144	FUB-144 CAS:2185863-15-2	ND ND	ND
FUBAMB	MMB-FUBINACA CAS:1971007-92-7	ND ND	ND
ABFUB	AB-FUBINACA CAS:1185282-01-2	ND ND	ND
ABCHMI	AB-CHMINACA CAS:1185887-21-1	ND ND	ND
ADB FUB	ADB-FUBINACA CAS:1445583-51-6	ND ND	ND
ADBPINA	ADB-PINACA CAS:1633766-73-0	ND ND	ND
MABCHMI	MAB-CHMINACA CAS:1863065-92-2	ND ND	ND
MDMBCHMI	MDMB-CHMICA CAS:1971007-95-0	ND ND	ND
5FADB	(R)-5-fluoro ADB CAS:1838134-16-9		ND
CUMYPINA	5-fluoro CUMYL-PINACA CAS:1400742-16-6		ND
AFB48	AKB48 N-(4-fluorobenzyl) analog CAS:2180933-90-6		ND
5FAMB	5-fluoro AMB CAS:1801552-03-3		ND
5FABICA	5-fluoro ABICA CAS:1801338-26-0		ND
5FSDB006	5-fluoro SDB-006 CAS:1776086-02-2		ND
ADTHPIN	ATHPINACA isomer 1 CAS:1400742-48-4		ND
ADBCHMI	ADB-CHMICA CAS:2221100-70-3		ND
SGT67	5-fluoro CUMYL-PICA CAS:1400742-18-8		ND
CUMPINA	CUMYL-PINACA CAS:1400742-15-5		ND
CUMP7AIC	5-fluoro CUMYL-P7AICA CAS:2171492-36-5		ND
CUMPICA	CUMYL-PICA CAS:1400742-32-6		ND
SDB006	SDB-006 CAS:695213-59-3		ND
ABPINA	AB-PINACA CAS:1445752-09-9		ND
SGT78	4-cyano CUMYL-BUTINACA CAS:1631074-54-8		ND
5FMD2201	5-fluoro MDMB-PICA CAS:1971007-88-1		ND
4FMDBIN	4-fluoro MDMB-BUTINACA CAS:2390036-46-9		ND
MD4enPIN	MDMB-4en-PINACA CAS:2504100-70-1		ND
4FMDBIC	4-fluoro MDMB-BUTICA CAS:2682867-53-2		ND
CUMPEGA	CUMYL-PeGACLONE CAS:2160555-55-3		ND
ADBBUTI	ADB-BUTINACA CAS:2682867-55-4		ND
5FCUMPeG	5-fluoro CUMYL-PeGACLONE CAS:2377403-49-9		ND
ADB4PIN	ADB-4en-PINACA CAS:2666932-44-9		ND
5FMBPICA	5-fluoro EDMB-PICA CAS:2666934-54-7		ND
5BrAKB48	5-bromo APINACA CAS:2160555-51-9		ND
			ND

Short	Substance name	Assay	M.
5FEPIC	5-fluoro EMB-PICA CAS:2648861-83-8	% ND	U.
MD5BrIN	MDMB-5Br-INACA CAS:MD5BrIN	ND ND	ND
ADB5BrIN	ADB-5Br-INACA CAS:ADB5BrIN	ND ND	ND
EADBFU	5,3-ADB-4en-PFUPPYCA CAS:EADBFU	ND ND	ND
FUACADB	ADB-FUBIATA CAS:2938025-73-9	ND ND	ND
AP5BIN	ADB-5'Br-PINACA CAS:AP5BIN	ND ND	ND
SGT152	CUMYL-NBMINACA CAS:1631074-60-6	ND ND	ND
ADBHEX	ADB-HEXINACA CAS:ADBHEX	ND ND	ND
RCS4	RCS-4 CAS:1345966-78-0	ND ND	ND
FAP7A	5-fluoro 7-APAICA CAS:2682867-58-7	ND ND	ND
BZHEX	MDA 19 CAS:1048973-47-2	ND ND	ND
BZPOX	BZO-POXIZID CAS:1048973-64-3		ND
CUCHM	CUMYL-CH-MeGACLONE CAS:2813950-07-9		ND
7AICA	AP7AICA CAS:2366269-62-5		ND
CMP7CA	CUMYL-P7AICA CAS:2366268-31-5		ND
EDMBPIN	EDMB-PINACA CAS:2666934-55-8		ND
MDMBPIN	MDMB-PINACA CAS:1971007-99-4		ND
MDMBBUTI	MDMB-BUTINACA CAS:3039541-81-3		ND
MDMB5INA	MDMB-5Me-INACA		ND
EDMB4PIN	EDMB-4en-PINACA CAS:EDMB4PIN		ND
MDMBrPIN	MDMB-5'Br-4en-PINACA CAS:MDMBrPIN		ND
			ND

Method of Analysis: GC-MS (Gas Chromatography-Mass Spectrometry). The determined measurement uncertainty (M. U.) is always given in the same unit as specified result. ND = Not Detected - below detection limit 0.01%.

Issued by SFP d.o.o., Ljubljana, Slovenia. These results relate only to the test article listed in this report. This certificate was reviewed by Ivan Plantan PhD, quality control on 2025-03-27.

This certificate was approved by Tina Pungartink, director on 2025-03-27.


