

# SYNTHETIC CANNABINOID BILLS, STATUTES & REGULATIONS

The Drug Enforcement Agency (DEA) is currently reviewing the following five substances:

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5-(1,1-dimethylheptyl)-2-[(1R,3S)-3-hydroxycyclohexyl]-phenol (CP-47,497)
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5-(1,1-dimethyloctyl)-2-[(1R,3S)-3-hydroxycyclohexyl]-phenol (cannabicyclohexanol)

1-pentyl-3-(1-naphthoyl)indole (JWH-018 and AM678)

1-butyl-3-(1-naphthoyl)indole (JWH-073)

1-[2-(4-morpholinyl)ethyl]-3-(1-naphthoyl)indole (JWH-200).

For purposes of this memorandum, the foregoing substances will be referred to by their trade or other name as indicated in the parentheses following the chemical designation.

The DEA indicates that the following generic language is used by other countries to control the substances under review by the DEA:

The term Cannabimimetic Agents means, collectively, the chemicals that meet the criteria of any one or more of paragraphs (a) through (e). Any substance within the structural classes identified below that is a cannabinoid receptor type 1 (CB1 receptor) agonist as demonstrated by binding studies and functional assays:

- (a) 2-(3-hydroxycyclohexyl)phenol with substitution at the 5-position of the phenolic ring by alkyl or alkenyl, whether or not substituted on the cyclohexyl ring to any extent.
- (b) 3-(1-naphthoyl)indole or 3-(1-naphthyl)indole by substitution at the nitrogen atom of the indole ring, whether or not further substituted on the indole ring to any extent, whether or not substituted on the naphthoyl or naphthyl ring to any extent.
- (c) 3-(1-naphthoyl)pyrrole by substitution at the nitrogen atom of the pyrrole ring, whether or not further substituted in the indole ring to any extent, whether or not substituted on the naphthoyl ring to any extent.
- (d) 1-(1-naphthylmethyl)indene by substitution of the 3-position of the indene ring, whether or not further substituted in the indene ring to any extent, whether or not substituted on the naphthyl ring to any extent.
- (e) 3-phenylacetylindole or 3-benzoylindole by substitution at the nitrogen atom of the indole ring, whether or not further substituted in the indole ring to any extent, whether or not substituted on the phenyl ring to any extent.

The Advisory Council on the Misuse of Drugs (ACMD), a panel of experts tasked with advising the British government on the regulation and control of substances, has proposed similar language as follows:

Groups 1 and 2 (Naphthoylindoles and naphthylmethylindoles) (N = 74 and 9 respectively)

"Any compound structurally derived from 3-(1-naphthoyl)indole or 1H-indol-3-yl-(1-naphthyl)methane by substitution at the nitrogen atom of the indole ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl whether or not further substituted in the indole ring to any extent, whether or not substituted in the naphthyl ring to any extent."

## Group 3 (Naphthoylpyrroles) (N = 32)

"Any compound structurally derived from 3-(1-naphthoyl)pyrrole by substitution at the nitrogen atom of the pyrrole ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the pyrrole ring to any extent, whether or not substituted in the naphthyl ring to any extent."

## Group 4 (Naphthylmethylindenes) (N = 3)

"Any compound structurally derived from 1-(1-naphthylmethyl)indene by substitution at the 3-position of the indene ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl whether or not further substituted in the indene ring to any extent, whether or not substituted in the naphthyl ring to any extent."

# Group 5 (Phenylacetylindoles) (N = 28)

"Any compound structurally derived from 3-phenylacetylindole by substitution at the nitrogen atom of the indole ring with alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not further substituted in the indole ring to any extent, whether or not substituted in the phenyl ring to any extent."

#### Group 6 (Cyclohexylphenols) (N = 16)

"Any compound structurally derived from 2-(3-hydroxycyclohexyl)phenol by substitution at the 5-position of the phenolic ring by alkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl or 2-(4-morpholinyl)ethyl, whether or not substituted in the cyclohexyl ring to any extent."

Both the language from the DEA and the ACMD will be referred to throughout this memorandum as the "generic language."

Currently, 47 states either have bills proposing to add one or more of the five substances or some variation thereof, or already have statutes or regulations on the books including one or more of the substances.

#### I. BILLS

The following is a list of states with bills seeking to add one or more of the five chemical substances under review by the DEA. Highlighted bills have been passed and signed by that state's governor.

- U.S. Congress: 2011 Cong. U.S. S 605 seeks to add all five substances and the generic language under review by the DEA
- Alabama: 2011 AL H.B. 163 seeks to add different version of JWH-200 [(1-(2-morpholin-4-yethyl)indol-3-yl)-naphthalen-1-yl methanone] and different version of CP 47,497 [2-[(1R,3S)-3-hydroxycyclohexyl]-5-(2-methylnonan-2-yl)phenol] plus others
- Alabama: 2011 AL S.B. 235 seeks to add same as H.B. 163
- Alabama: 2011 AL S.B. 283 seeks to add same as H.B. 163
- Alaska: 2011 AK H.B. 7 seeks to add JWH-018, JWH-073, JWH-200, and a different version of CP-47,497 [2-[(1R,3S) -3-hydroxycyclohexyl]-5-(2-methyloctan-2-yl)phenol], homologues of CP-47,497, plus others
- Alaska: 2011 AK S.B. 17 seeks to add the same as H.B. 7
- Arizona: 2011 AZ H.B. 2167 seeks to add all five substances plus others
- Arkansas: 2011 AR S.B. 423 seeks to add all five substances plus others
- California: 2011 CA S.B. 42 seeks to add all five substances
- Colorado: 2011 CO S.B. 134 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and its homologues
- Connecticut: 2011 CT S.B. 761 seeks to add JWH-018, JWH-073, JWH-200 without chemical designations, plus others
- Connecticut: 2011 CT S.B. 1098 seeks to add all
- Delaware: 2011 DE H.B. 30 seeks to add JWH-018, JWH-073, JWH-200, CP 47,497 and its homologues without chemical designation, plus others
- Florida: 2011 FL S.B. 336 seeks to add JWH-018, JWH-073, the AK version of CP-47,497, the (C8) homologue of CP 47,497 which appears to be the chemical designation of cannabicyclohexanol, plus others
- Florida: 2011 FL H.B. 39 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497, the (C8) homologue, plus others

- Florida: 2011 FL S.B. 204 seeks to add same as H.B. 39
- Georgia: 2011 GA H.B. 199 seeks to add JWH-200
- Georgia: 2011 GA S.B. 93 seeks to add JWH-200
- Hawaii: 2011 HI H.B. 1085 seeks to add JWH-018, JWH-073, the AK version of CP 47,497, the dimethyloctyl homologues of CP 47,497, and cannabicyclohexanol
- Hawaii: 2011 S.B. 1305 same as H.B. 1085
- Idaho: 2011 ID H.B. 139 seeks to add the generic language from the ACMD report
- Idaho: 2011 ID H.B. 86 same as H.B. 139
- Illinois: 2011 IL H.B. 2917 seeks to add CP 47,497 and its homologues
- Illinois: 2011 IL H.B. 3042 seeks to add JWH-200, CP 47,497, and cannabicyclohexanol
- Indiana: 2011 IN S.B. 57 seeks to add JWH-018, and different versions of JWH-073 [(naphthalene-1-yl-(1-butylindol-3-yl)methanone)], AL version of JWH-200 and the AK version of CP 47,497 and its homologues plus others
- Indiana: 2011 IN H.B. 1315 seeks to add JWH-018, JWH-073, JWH-200, and CP 47,497 without designating the molecular or chemical structure
- Indiana: 2011 IN S.B. 448 seeks to add the same as H.B. 1315
- Indiana: 2011 IN H.B. 1277 seeks to add the same as H.B. 1315
- Indiana: 2011 IN H.B. 1102 seeks to add the same as S.B. 57
- Indiana: 2011 IN S.B. 5 seeks to add the same as H.B. 1315
- Indiana: 2011 IN S.B. 152 seeks to add the same as H.B. 1315
- Iowa: 2011 IA L.D. 1274 seeks to add all five substances
- Iowa: 2011 IA H.F. 186 seeks to add JWH-018, JWH-073, the AK version of CP 47,497, its homologues, plus others
- Iowa: 2011 IA S.F. 462 seeks to add AK version of CP 47,497, and a different version of JWH-200 ([1-[2-(4-morpholinyl)ethyl]-1H-indol-3-yl]-1-naphthalenyl-methanone)
- Iowa: 2011 IA S.S.B. SSB1055 seeks to add same as S.F. 462
- Kansas: 2011 KS H.B. 2049 seeks to delete JWH-018, JWH-073 and add the generic language from the ACMD report with minor changes
- Kentucky: 2011 KY H.B. 121 seeks to add JWH-200 and others to its list of synthetic cannabinoids or agonists
- Kentucky 2011 KY S.B. 129 seeks to add same as H.B. 121

- Louisiana: 2011 LA H.B. 12 seeks to add the generic language
- Maine: 2011 ME H.P. 673 seeks to add JWH-018 and JWH-073 plus others
- Maryland: 2011 MD H.B. 189 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497, its homologues, plus others
- Maryland: 2011 MD S.B. 171 seeks to add same as H.B. 189
- Massachusetts: 2011 MA H.B. 01383 seeks to add JWH-018, JWH-073, CP 47,497 plus others
- Minnesota: 2011 MN H.F. 57 seeks to add JWH-018, JWH-073, the AL version of JWH-200, the AK version of CP 47,497, plus others
- Minnesota: 2011 MN S.F. 7 seeks to add same as H.F. 57
- Minnesota: 2011 MN S.F. 537 seeks to add all but cannabicyclohexanol
- Minnesota: 2011 MN S.F. 850 seeks to add same as H.F. 57
- Minnesota: 2011 MN S.F. 1166 seeks to add JWH-018, JWH-073, JWH-200, AK version of CP 47,497 plus others
- Minnesota: 2011 MN S.F. 760 amended to add same as S.F. 1166
- Mississippi: 2011 MS H.B. 1205 modifies the current statute to include the generic language from the ACMD report with the associated synthetic substances classified under each definition
- Missouri: 2011 MO H.B. 641 seeks to add JWH-200, CP 47,497, cannabicyclohexanol plus others
- Montana: 2011 MT H.B. 185 seeks to add JWH-018, JWH-073, JWH-200, and a version of CP 47,497 [2-(3-hydroxycyclohexyl)-5-(2-methyloctan-2-yl)phenol], its dimethylhexyl, dimethyloctyl and dimethylnonyl homologues, plus others; also adds the generic language from the ACMD report without the group classification names
- Nebraska: 2011 NE L.B. 19 states as follows: "Any material, compound, mixture or preparation containing any detectable quantity of synthetically produced cannabinoids, their salts, isomers and salts of isomers, unless specifically excepted elsewhere in this section. Since nomenclature of these synthetically produced cannabinoids are not internationally standardized and may continue to evolve, these structures or compounds of these structures shall be included under this subsection, regardless of their specific numerical designation of atomic positions covered, so long as it can be determined through some form of scientific testing or analysis that the substance contains properties that fit within one or more of the following categories

# ..." It includes the generic language from the ACMD (with the group classification names) with some changes.

- Nevada: 2011 NV S.B. 256 seeks to add all five substances
- Nevada: 2011 NV S.B. 228 seeks to add all five substances
- New Hampshire: 2011 NH H.B. 448 seeks to add JWH-018, JWH-073 and the AK version of CP 47,497
- New Jersey: 2010 NJ S.B. 2606 seeks to add JWH-018 and JWH-073 plus others
- New Jersey: 2010 NJ A.B. 2644 seeks to add same as S.B. 2606
- New Mexico: 2011 NM S.B. 134 seeks to add JWH-073, JWH-018, JWH-200 and CP 47,497 and homologues
- New Mexico: 2011 NM H.B. 336 seeks to add all five substances plus others
- New York: 2009 NY A.B. 10439 seeks to add JWH-018 and JWH-073
- New York: 2011 NY S.B. 1834 seeks to add JWH-018, JWH-073 and a version of CP 47,497 as follows: 2-5-(2-methyloctan-2-yl)phenol and homologues
- New York: 2009 NY A.B. 11216 seeks to add the same as S.B. 1834
- New York: 2009 NY S.B. 7081 seeks to add the same as S.B. 1834
- New York: 2011 NY A.B. 5008 seeks to add JWH-018, JWH-073
- North Carolina: 2009 NC H.J.R. 2083 joint resolution to study the regulation of synthetic marijuana, known as "K2," "spice," or "JWH-018" to report to the 2011 regular session of the General Assembly
- North Carolina: 2011 NC S.B. 9 seeks to add the generic language from the ACMD report and cites all five substances as trade or other names under the appropriate group classification name (i.e., JWH-018, JWH-073, JWH-200 under naphthoylindoles), plus others
- North Carolina: 2011 NC H.B. 12 same as S.B. 9
- North Carolina: 2011 NC S.B. 4 same as S.B. 9
- North Carolina: 2011 NC S.B. 7 same as S.B. 9
- North Dakota: 2011 ND S.B. 2119 seeks to add all five substances plus others
- Ohio: 2009 OH S.B. 275 seeks to add JWH-018 and JWH-073
- Ohio: 2009 OH H.B. 544 seeks to add same as S.B. 275
- Ohio: 2011 OH S.B. 57 same as S.B. 275
- Ohio: 2011 H.B. 64 seeks to add all five substances

- Oklahoma: 2011 OK S.B. 919 seeks to add four plus others, including the CP 47,497 homologues, by trade or other name designation only; also adds the generic language from the ACMD report with the group classification names as well as a list of the trade names included in the report
- Oregon: 2011 OR H.B. 2462 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and its homologues, plus others
- Oregon: 2011 OR H.B. 2709 seeks to add the same as H.B. 2462
- Oregon: 2011 OR H.B. 3022 directs the Board of Pharmacy to classify JWH-018, JWH-073, JWH-200 and the AK version of CP 47,497, its homologues, plus others as schedule I drugs
- Pennsylvania: 2011 PA H.B. 176 seeks to add JWH-018, JWH-073, the NY version of CP 47,497, and the IN version of JWH-200
- Pennsylvania: 2011 PA S.B. 164 seeks to add JWH-018, JWH-073, and the NY version of CP 47,497
- Pennsylvania: 2011 PA H.B. 365 seeks to add JWH-018, JWH-073, a different version of JWH-200 [(1-(2-morpholin-4-ylethyl)indol-3-yl)-naphthalen-1-ylmethanone], and a different version of CP 47,497 [5-(2-methyloctan-2-yl)phenol], its homologues, plus others
- Rhode Island: 2011 RI H.B. 5066 seeks to add "synthetic cannabinoids" generally
- South Carolina: 2011 SC S.B. 78 seeks to add JWH-018, JWH-073 and cannabicyclohexanol and "any other synthetic equivalent of the substances contained in the plant or in the resinous extracts of cannabis."
- South Carolina: 2011 SC H.B. 3137 seeks to add same as S.B. 78
- South Carolina: 2011 SC S.B. 374 seeks to add all five substances
- South Carolina: 2011 SC H.B. 3144 seeks to add same as S.B. 78

# - South Dakota: 2011 SD H.B. 1015 – seeks to add all five plus others

- Tennessee: 2011 S.B. 1726 seeks to add the generic language with trade or other name designations
- Tennessee: 2011 H.B. 1889 same as S.B. 1726
- Texas: 2011 TX H.B. 49 seeks to add three JWH-018, JWH-073, the AK version of CP 47,497 and its homologues
- Texas: 2011 TX S.B. 331 seeks to add JWH-018, JWH-073, JWH-200 and multiple others to penalty group 2; also includes the generic language from the ACMD, like OK, including the group classification names and list of trade names
- Texas: 2011 TX H.B. 597 seeks to add same as S.B. 331

- Texas: 2011 TX H.B. 108 seeks to add JWH-018
- Texas: 2011 TX H.B. 1011 seeks to add JWH-018 and JWH-073
- Utah: 2011 UT H.B. 23 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and its C6, C8 and C9 homologues, plus others
- Utah: 2011 UT H.B. 200 seeks to add same as H.B. 23
- Virginia: 2010 VA S.B. 745 seeks to add JWH-018, JWH-073, JWH-200, different version of CP 47,497 as follows: 5-(1,1-dimethylheptyl)-2-[3-hydroxycyclohexyl]-phenol and its homologues plus others
- Virginia: 2010 VA H.B. 1434 same as S.B. 745
- Virginia: 2010 VA H.B. 2049 seeks to add JWH-018, JWH-073, different version of CP 47,497 [2-(3-hydroxycyclohexyl)-5-(2-methyloctan-2-yl)phenol], its homologues, plus others
- Washington: 2011 WA H.B. 1285 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and its homologues
- Washington: 2011 WA S.B. 5101 bill amended to add the ACMD generic language without designating any of the five specific chemical substances
- West Virginia: 2011 WV S.B. 63 seeks to add JWH-018 and JWH-073
- West Virginia: 2011 WV H.B. 2505 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and its homologues and specifically lists the CP 47,497 C8 homologue by chemical makeup, plus others
- West Virginia: 2011 WV S.B. 276 seeks to add JWH-018, JWH-073 and the AK version of CP 47,497
- Wisconsin: 2011 WI A.B. 57 seeks to add JWH-018, JWH-073, JWH-200, the AK version of CP 47,497, plus its homologues and others
- Wisconsin: 2011 WI S.B. 54 seeks to add all five substances
- Wyoming: 2011 WY H.B. 62 seeks to add JWH-018, JWH-073 and the AK version of CP 47,497
- Wyoming: 2011 WY S.F. 59 seeks to add the AK version of CP 47,497 and a very condensed version of the generic language from the ACMD

#### II. REGULATIONS

The following states have taken regulatory action or proposed regulation to schedule one or more of the five chemical substances under review by the DEA:

- Arkansas: AR ADC 0070.15.8-I, II, III, IV, V, VI, VII, VIII
  - o 2010 AR Reg Text 229596
  - The Arkansas Board of Health adopted regulation on October 31, 2010 to schedule JWH-018, JWH-073 and others
- Idaho: ID ADC 27.01.01.434
  - o 2010 ID Reg Text 240322
  - The Idaho Board of Pharmacy adopted a temporary rule on November 3, 2010 to schedule JWH-018, JWH-073, JWH-200, the AK version of CP 47,497, its homologues, and others
- Iowa: IA ADC 657-10.41(124A)
  - o 2010 IA Reg Text 232026
  - The Iowa Pharmacy Board scheduled JWH-018, JWH-073, the AK version of CP 47,497, its homologues, and others on an emergency basis August 11, 2010.
- Minnesota: MN ADC 6800.4210
  - o 2010 MN Reg Text 240247
  - The Minnesota Board of Pharmacy proposed a rule on November 1, 2010 to schedule JWH-018, JWH-073, JWH-200, the AK version of CP 47,497 and others
- Nevada: NAC 453.510
  - o 2011 NV Reg Text 244323
  - o The Nevada Board of Pharmacy has proposed regulation to schedule JWH-018, JWH-073, JWH-200, CP 47,497, its homologues, plus others
- North Dakota: ND ADC 61-13-01-03
  - o 2010 ND Reg Text 218953
  - o The North Dakota Board of Pharmacy scheduled JWH-018, JWH-073, the AK version of CP 47,497, its homologues and others on February 26, 2010.
- Oregon: OR ADC 855-080-0021
  - o 2010 OR Reg Text 240821
  - The Oregon Board of Pharmacy temporarily scheduled JWH-018, JWH-073, a different version of JWH-200, different version of CP 47,497, its homologues and others on an emergency basis on November 1, 2010.

- Washington: WA 246-887-100
  - o WA Reg. Text 249135
  - The Washington Department of Health scheduled JWH-018, JWH-073, JWH-200, CP 47,497 and its homologues on an emergency basis on February 2, 2011.

#### III. STATUTES

States with statutes already including 1-pentyl-3-(naphthoyl)indole a/k/a JWH-018 and AM678 (AL, GA, IL, KS, KY, LA, MI, MS, MO, OK, TN):

- Ala. Code 1975 §13A-12-214.1(a)(2)
- Ga. Code Ann. §16-13-25(12)(A)
- 720 ILCS 570/204(d)(31)
- K.S.A. §65-4105(d)(33)
- K.R.S. §218A.010(39) definition of "synthetic cannabinoid agonists or piperazines"
- LSA-R.S. §40:964(C)(32)(c)
- M.C.L.A. §333.7212(1)(h)(iii)
- Miss. Code Ann. §41-29-113(c)(38)(A)
- V.A.M.S.  $\S195.017(2)(4)(x)$
- 63 Okl.St.Ann. §2-204(C)(30)
- Tenn. Code Ann. §39-17-438(a) "Salvia divinorum or synthetic cannabinoids JWH 018, JWH 073, HU 210 and HU 211; production, distribution and possession; exceptions; penalty"

States with statues already including 1-butyl-3-(1-naphthoyl)indole a/k/a JWH-073 (AL, IL, KS, KY, LA, MI, MS, MO, OK, TN):

- Ala. Code 1975 §13A-12-214.1(a)(3)
- 720 ILCS 570/204(d)(32)
- K.S.A. §65.4105(d)(34)
- K.R.S. §218A.010(39) definition of "synthetic cannabinoid agonists or piperazines"
- LSA-R.S. §40:964(C)(32)(d)
- M.C.L.A. §333.7212(1)(h)(iv)
- Miss. Code Ann. §41-29-113(c)(38)(D)
- V.A.M.S. §195.017(2)(4)(w)
- 63 Okl.St.Ann. §2-204(C)(29)
- Tenn. Code Ann. §39-17-438(a) "Salvia divinorum or synthetic cannabinoids JWH 018, JWH 073, HU 210 and HU 211; production, distribution and possession; exceptions; penalty"

States with statutes already including 1-[2-(4-morpholinyl)ethyl]-3-(1-naphthoyl)indole a/k/a JWH-200 (MI, MS):

- M.C.L.A. §33.7212(1)(h)(vi) different chemical makeup in statute [1-[2-(4-morpholinyl)e thyl]-1H-indol-3-yl]-1-naphthalenyl-methanone
- Miss. Code Ann. §41-29-113(c)(38)(E)

States with statutes already including 5-(1,1-dimethylheptyl)-2-[(1R,3S)-3-hydroxycyclohexyl]-phenol a/k/a CP 47,497 (GA, KY, LA, MI, MS, MO):

- Ga. Code Ann. §16-13-25(12)(C) different chemical makeup in statute 2-(3-hydroxycyclohexyl)-5-(2-methyloctan-2-yl)phenol
- K.R.S. §218A.010(39) different chemical makeup in statute 2-[(1R,3S)-3-hydroxycyclohexyl]-5-(2-methloctan-2-yl)phenol
- LSA-R.S. §40:964(C)(32)(a) follows KY
- M.C.L.A. §333.7212(1)(h)(ii) follows KY
- Miss. Code Ann. §41-29-113(c)(38)(C) follows GA
- V.A.M.S. §195.017(2)(4)(dd) follows KY

No state already specifically includes 5-(1,1-dimethyloctyl)-2-[(1R,3S)-3-hydroxycyclohexyl]-phenol a/k/a cannabicyclohexanol in its statute defining or scheduling synthetic cannabinoids. However, Louisiana includes the C6, C7, C8 and C9 homologues of CP 47,497; Mississippi includes the dimethyloctyl homologue of CP 47,497; and Michigan includes its side chain homologues. Several states refer to cannabicyclohexanol as the C8 homologue of CP 47,497 in their bills proposing to add cannabicyclohexanol as a Schedule I substance which indicates that cannabicyclohexanol is a homologue of CP 47,497.

Any code section designated as having a different chemical makeup than the substance being reviewed by the DEA was included based upon its "trade or other name" designation in the proposed legislation or statute.