Scheduling Novel Psychoactive Substances – Model Language

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Policy Statement

New novel psychoactive substances (also known as synthetic designer drugs) are being marketed and sold in cities, towns, and counties across the country. These substances are not necessarily controlled under federal or state law but are designed to mimic the effects of illegal drugs. These substances fall into one of several categories – synthetic cannabinoids, those substances that mimic or purport to mimic the effects of marijuana; substituted cathinones, those substances that mimic or purport to mimic the effects of cathinone and methcathinone based drugs; and other synthetic substances, a catchall category for those synthetics which may be hallucinogenic, narcotic, psychedelic, or stimulant substances and do not fall into one of the other two categories. These substances have been known to cause increased heart rate and increased blood pressure (which may lead to heart attacks and strokes, chest pains, nosebleeds, and sweating), agitation, anxiety, nausea, vomiting, tachycardia, tremors, seizures, hallucinations, paranoid behavior, and non-responsiveness.

In most cases, the chemicals that make up these substances are shipped into the United States from countries overseas, notably south and East Asian countries. Law enforcement has identified four main countries where novel psychoactive substances are synthesized – China, India, Korea, and Pakistan. They are easy to obtain via the internet, and are typically shipped directly to the distributor or ordered by the distributor or users via the internet.

Most retailers sell these products in small doses in foil packets which are designed to attract teenagers and young adults. Synthetic cannabinoids are typically leafy, while substituted cathinones and other synthetics take many forms – pill, capsule, crystal, powder, tablet, and even liquid – and are typically smoked, snorted, injected, or swallowed.

Federal and state legislatures have made efforts to schedule novel psychoactive substances. In response to those efforts, chemists immediately reconfigured the specific substances that were prohibited to produce "new" versions of these synthetic drugs. This was accomplished by altering the molecular architecture of the chemicals used in the products to produce a series of different compounds which are closely structurally related to the prohibited substances, but which are not listed in the state or federal schedules of controlled substances laws. The National Alliance for Model State Drug Laws has found that forty-seven (47) states and the District of Columbia have outlawed specific versions of synthetic marijuana, synthetic cathinones, or other novel psychoactive substances, but minor variations in the chemical composition of these products create similar drugs not prohibited by current legislation. In some cases, these manufacturers and/or distributors of these new products went so far as to claim on the packaging

that the products contained no prohibited chemicals or were in accordance with state and federal laws.

In 2010, the American Association of Poison Control Centers ("AAPCC") received 2,906 calls relating to exposures to synthetic marijuana and 304 calls relating to exposures to bath salts (substituted cathinones). In 2011, the AAPCC received 6,959 calls relating to exposures to synthetic marijuana and 6,138 calls relating to exposures to bath salts. Those numbers dropped significantly in 2012 with the AAPCC receiving 5,202 calls relating to exposures to synthetic marijuana and 2,655 calls relating to exposures to bath salts. As of October 31, 2013, the AAPCC has received 2,222 calls relating to exposures to synthetic marijuana and 833 calls relating to exposures to bath salts (substituted cathinones).

Novel psychoactive substances are cheap, easy to make, and return a high profit for manufacturers and distributors. One of the major issues with these drugs is the ease with which they can be purchased. Synthetic cannabinoids, substituted cathinones, and other synthetic substances are sold in convenience stores, gas stations, "head" shops, discount beer and tobacco shops, and on the internet. Typically, these substances are sold as herbal incense, bath salts, plant food, jewelry cleaner, iPod cleaner, scratch remover, and are labeled "not for human consumption."

The Model Law sets out language which can be used to schedule novel psychoactive substances in such a way that it limits the ability of chemists to simply alter a substance by one or two molecules and create a new substance that is not covered by the existing law.

Highlights of the Model Scheduling of Novel Psychoactive Substances Law

- Sets out a list of class definitions for synthetic cannabinoids with examples for each class
- Sets out class language for substituted cathinones and a list of substituted cathinones
- Sets out a list of class definitions for other novel psychoactive substances with examples for each class

Section One. Synthetic Cannabinoid Model Language.

Adamantoylindoles or adamantoylindazoles, including adamantyl carboxamide indoles and adamantyl carboxamide indazoles, or any compound structurally derived from 3-(1-adamantoyl) indole, 3-(1-adamantoyl)indazole, 3-(2-adamantoyl)indole, N-(1-adamantyl)-1H-indole-3-carboxamide, or N-(1-adamantyl)-1H-indazole-3-carboxamide by substitution at the nitrogen atom of the indole or indazole ring with alkyl, haloalkyl, alkenyl, cyanoalkyl, hydroxyalkyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the indole or indazole ring to any extent and whether or not substituted in the adamantyl ring to any extent, including, but not limited to, the following:

2NE1, 5F-AKB-48, AB-001, AKB-48, AM-1248, JWH-018 adamantyl carboxamide, STS-135

Benzoylindoles - any compound structurally derived from a 3-(benzoyl)indole structure with substitution at the nitrogen atom of the indole ring with alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the indole ring to any extent and whether or not substituted in the phenyl ring to any extent, including, but not limited to, the following:

AM-630, AM-661, AM-679, AM-694, AM-1241, AM-2233, RCS-4, WIN 48,098 (Pravadoline)

Cyclohexylphenols - any compound structurally derived from 2-(3-hydroxycyclohexyl)phenol by substitution at the 5-position of the phenolic ring by alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the cyclohexyl ring to any extent, including, but not limited to, the following:

CP 47,497, CP 55,490, CP 55,940, CP 56,667, cannabicyclohexanol

Cyclopropanoylindoles – any compound structurally derived from 3-(cyclopropylmethanoyl)indole, 3-(cyclopropylmethanone)indole, 3-(cyclobutylmethanone)indole or 3-(cyclopentylmethanone)indole 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 cyclopropyl, cyclobutyl, or cyclopentyl rings to any extent.

Naphthoylindoles – 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,

haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl group, 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the naphthyl ring to any extent, including, but not limited to, the following:

AM-678, AM-1220, AM-1221, AM-1235, AM-2201, AM-2232, EAM-2201, JWH-004, JWH-007, JWH-009, JWH-011, JWH-015, JWH-016, JWH-018, JWH-019, JWH-020, JWH-022, JWH-046, JWH-047, JWH-048, JWH-049, JWH-050, JWH-070, JWH-071, JWH-072, JWH-073, JWH-076, JWH-079, JWH-080, JWH-081, JWH-082, JWH-094, JWH-096, JWH-098, JWH-116, JWH-120, JWH-122, JWH-148, JWH-149, JWH-164, JWH-166, JWH-180, JWH-181, JWH-182, JWH-189, JWH-193, JWH-198, JWH-200, JWH-210, JWH-211, JWH-212, JWH-213, JWH-234, JWH-235, JWH-236, JWH-239, JWH-240, JWH-241, JWH-242, JWH-258, JWH-262, JWH-386, JWH-387, JWH-394, JWH-395, JWH-397, JWH-398, JWH-399, JWH-400, JWH-412, JWH-413, JWH-414, JWH-415, JWH-424, MAM-2201, WIN 55,212

Naphthoylnaphthalenes – any compound structurally derived from naphthalene-1-yl-(naphthalene-1-yl) methanone with substitutions on either of the naphthalene rings to any extent, including, but not limited to, the following:

CB-13

Naphthoylpyrroles - any compound structurally derived from 3-(1-naphthoyl)pyrrole by substitution at the nitrogen atom of the pyrrole ring by alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the pyrrole ring to any extent and whether or not substituted in the naphthyl ring to any extent, including, but not limited to, the following:

JWH-030, JWH-031, JWH-145, JWH-146, JWH-147, JWH-150, JWH-156, JWH-243, JWH-244, JWH-245, JWH-246, JWH-292, JWH-293, JWH-307, JWH-308, JWH-309, JWH-346, JWH-348, JWH-363, JWH-364, JWH-365, JWH-367, JWH-368, JWH-369, JWH-370, JWH-371, JWH-373, JWH-392

Naphthylmethylindenes - any compound containing a naphthylideneindene structure or which is structurally derived from 1-(1-naphthylmethyl)indene with substitution at the 3-position of the indene ring by alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the indene ring to any extent and whether or not substituted in the naphthyl ring to any extent, including, but not limited to, the following:

JWH-171, JWH-176, JWH-220

Naphthylmethylindoles – any compound structurally derived from an H-indol-3-yl-(1-naphthyl) methane by substitution at the nitrogen atom of the indole ring by alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the indole ring to any extent and whether or not substituted in the naphthyl ring to any extent, including, but not limited to, the following:

JWH-175, JWH-184, JWH-185, JWH-192, JWH-194, JWH-195, JWH-196, JWH-197, JWH-199

Phenylacetylindoles - any compound structurally derived from 3-phenylacetylindole by substitution at the nitrogen atom of the indole ring with alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, or 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group, whether or not further substituted in the indole ring to any extent and whether or not substituted in the phenyl ring to any extent, including, but not limited to, the following:

Cannabipiperidiethanone, JWH-167, JWH-201, JWH-202, JWH-203, JWH-204, JWH-205, JWH-206, JWH-207, JWH-208, JWH-209, JWH-237, JWH-248, JWH-249, JWH-250, JWH-251, JWH-253, JWH-302, JWH-303, JWH-304, JWH-305, JWH-306, JWH-311, JWH-312, JWH-313, JWH-314, JWH-315, JWH-316, RCS-8

Quinolinylindolecarboxylates – any compound structurally derived from quinolin-8-yl-1H-indole-3-carboxylate by substitution at the nitrogen atom of the indole ring with alkyl, haloalkyl, benzyl, halobenzyl, alkenyl, haloalkenyl, alkoxy, cyanoalkyl, hydroxyalkyl, cycloalkylmethyl, cycloalkylethyl, (N-methylpiperidin-2-yl)alkyl, (4-tetrahydropyran)alkyl, or 2-(4-morpholinyl)alkyl, whether or not further substituted in the indole ring to any extent, whether or not substituted in the quinoline ring to any extent, including:

BB-22, 5-Fluoro-PB-22, PB-22

Tetramethylcyclopropanoylindoles – any compound structurally derived from 3-tetramethylcyclopropanoylindole, 3-(1-tetramethylcyclopropyl)indole, 3-(2,2,3,3-tetramethylcyclopropyl)indole or 3-(2,2,3,3-tetramethylcyclopropylcarbonyl)indole with substitution at the nitrogen atom of the indole ring by an alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl, alkenyl, cycloalkylmethyl, cycloalkylethyl, 1-(N-methyl-2-piperidinyl)methyl, 2-(4-morpholinyl)ethyl, 1-(N-methyl-2-pyrrolidinyl)methyl, 1-(N-methyl-3-morpholinyl)methyl, or (tetrahydropyran-4-yl)methyl group whether or not further substituted in the indole ring to any extent and whether or not substituted in the tetramethylcyclopropanoyl ring to any extent, including, but not limited to, the following:

5-bromo-UR-144, 5-chloro-UR-144, 5-fluoro-UR-144, A-796,260, A-834,735, AB-034, UR-144, XLR11

Tetramethylcyclopropane-thiazole carboxamides – any compound structurally derived from 2,2,3,3-tetramethyl-N-(thiazol-2-ylidene)cyclopropanecarboxamide by substitution at the nitrogen atom of the thiazole ring by alkyl, haloalkyl, benzyl, halobenzyl, alkenyl, haloalkenyl, alkoxy, cyanoalkyl, hydroxyalkyl, cycloalkylmethyl, cycloalkylethyl, (N-methylpiperidin-2-yl)alkyl, (4-tetrahydropyran)alkyl, or 2-(4-morpholinyl)alkyl, whether or not further substituted in the thiazole ring to any extent, whether or not substituted in the tetramethylcyclopropyl ring to any extent, including:

A-836,339

Unclassified Synthetic Cannabinoids:

AM-087 (6aR,10aR)-3-(2-methyl-6-bromohex-2-yl)-6,6,9-trimethyl-6a,7,10,10a-tetrahydrobenzo[c]chromen-1-ol

AM-356 (methanandamide) (5Z,8Z,11Z,14Z)-N-[(1R)-2-hydroxy-1-methylethyl]icosa-5,8,11,14-tetraenamide; OR arachidonyl-1'-hydroxy-2'-propylamide

AM-411 (6aR,10aR)-3-(1-adamantyl)-6,6,9-trimethyl-6a,7,10,10a-tetrahydrobenzo[c]chromen-1-ol

AM-855 (4aR,12bR)-8-hexyl-2,5,5-trimethyl-1,4,4a,8,9,10,11,12b-octahydronaphtho[3,2-c]isochromen-12-ol

AM-905 (6aR,9R,10aR)-3-[(E)-hept-1-enyl]-9-(hydroxymethyl)-6,6-dimethyl-6a,7,8,9,10,10a-hexahydrobenzo[c]chromen-1-ol

AM-906 (6aR,9R,10aR)-3-[(Z)-hept-1-enyl]-9-(hydroxymethyl)-6,6-dimethyl-6a,7,8,9,10,10a-hexahydrobenzo[c]chromen-1-ol

AM-2389 (6aR,9R,10aR)-3-(1-hexyl-cyclobut-1-yl)-6a,7,8,9,10,10a-hexahydro-6,6-dimethyl-6H-dibenzo[b,d]pyran-1,9 diol

BAY 38-7271 (-)-(R)-3-(2-Hydroxymethylindanyl-4-oxy)phenyl-4,4,4-trifluorobutyl-1-sulfonate

CP 50,556-1 (Levonantradol) 9-hydroxy-6-methyl-3-[5-phenylpentan-2-yl]oxy-5,6,6a,7,8,9,10,10a-octahydrophenanthridin-1-yl]acetate; OR [(6S,6aR,9R, 10aR)-9-hydroxy-6-methyl-3-[(2R)-5-ph enylpentan-2-yl]oxy-5,6,6a,7,8,9,10,10a-octahydrophenanthridin-1-yl] acetate; OR [9-hydroxy-6-methyl-3-[5-phenylpentan-2-yl]oxy-5,6,6a,7,8,9,10, 10a-octahydrophenanthridin-1-yl]acetate

HU-210 (6aR,10aR)-9-(hydroxymethyl)-6,6-dimethyl-3-(2-methyloctan-2-yl)-6a,7,10,10a-tetrahydrobenzo[c] chromen-1-ol; OR [(6aR,10aR)-9-(hydroxymethyl)-6,6-dimethyl-3-(2-methyl octan-2-yl)-6a,7,10,10a-tetrahydrobenzo[c]chromen-1-ol; OR 1,1-Dimethylheptyl-11-hydroxytetrahydrocannabinol

HU-211 (Dexanabinol)	(6aS, 10aS)-9-(hydroxymethyl)-6,6-dimethyl-3-(2-methyloctan-2-yl)-6a,7,10,10a-tetrahydrobenzo[c]chromen-1-ol; OR (6aS, 10aS)-9-(hydroxymethyl)-6,6-dimethyl- 3-(2-methyloctan-2-yl)-6a,7,10,10a-tetrahydrobenzo[c]chromen-1-ol
HU-243	3-dimethylheptyl-11-hydroxyhexahydrocannabinol
HU-308	[(91R,2R,5R)-2-[2,6-dimethoxy-4-(2-methyloctan-2-yl)phenyl]-7,7-dimethyl-4-bicyclo[3.1.1]hept-3-enyl]methanol
HU-331	3-hydroxy-2-[(1R,6R)-3-methyl-6-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-2,5-cyclohexadiene-1,4-dione
HU-336	(6aR,10aR)-6,6,9-trimethyl-3-pentyl-6a,7,10,10a-tetrahydro-1H-benzo[c]chromene-1,4(6H)-dione
JTE-907	N-(benzol[1,3]dioxol-5-ylmethyl)-7-methoxy-2-oxo-8-pentyloxy-1,2-dihydroquinoline-3-carboxamide
JWH-051	((6aR,10aR)-6,6-dimethyl-3-(2-methyloctan-2-yl)-6a,7,10,10a-tetrahydrobenzo[c]chromen-9-yl)methanol
JWH-057	(6aR,10aR)-3-(1,1-dimethylheptyl)-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6H-Dibenzo[b,d]pyran
JWH-133	(6aR,10aR)-3-(1,1-Dimethylbutyl)-6a,7,10,10a-tetrahydro -6,6,9-trimethyl-6H-dibenzo[b,d]pyran
JWH-359	(6aR,10aR)- 1-methoxy- 6,6,9-trimethyl- 3-[(2R)-1,1,2-trimethylbutyl]-6a,7,10,10a-tetrahydrobenzo[c]chromene
URB-597	[3-(3-carbamoylphenyl)phenyl]-N-cyclohexylcarbamate
URB-602	[1,1'-Biphenyl]-3-yl-carbamic acid, cyclohexyl ester; OR cyclohexyl [1,1'-biphenyl]-3-ylcarbamate
URB-754	6-methyl-2-[(4-methylphenyl)amino]-4H-3,1-benzoxazin-4-one
URB-937	3'-carbamoyl-6-hydroxy-[1,1'-biphenyl]-3-yl cyclohexylcarbamate
WIN 55,212-2	(R)-(+)-[2,3-dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1,2,3-de]-1,4-benzoxazin-6-yl]-1-napthalenylmethanone; OR [2,3-Dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[(1,2,3-de)-1,4-benzoxazin-6-yl]-1-napthalenylmethanone

Section Two. Substituted Cathinones Model Language.

Any compound (not being bupropion …) structurally derived from 2-amino-1-phenyl-1-propanone by modification in any of the following ways, that is to say,

(i) by substitution in the phenyl ring to any extent with alkyl, alkoxy, alkylenedioxy, haloalkyl or halide substituents, whether or not further substituted in the phenyl ring by one or more other univalent substituents;
(ii) by substitution at the 3-position with an alkyl substituent;
(iii) by substitution at the nitrogen atom with alkyl or dialkyl groups, or by inclusion of the nitrogen atom in a cyclic structure.

Trade or Other Name	Chemical Compound
2-diphenylmethylpyrrolidine	2-benzylhydrylpyrrolidin; OR (S)-(-)-2-(diphenylmethyl)pyrrolidine; OR (S)-2-diphenylmethylpyrrolidine; OR (2S)-2-benzylhydrylpyrrolidine; OR (2S)diphenylmethylpyrrolidine
2-DPMP	desoxypipradrol; OR diphenylprolinol; OR 2-diphenylmethylpiperidine; OR 2-benzhydrylpiperidine
2-FMC	2-fluoromethcathinone
3,4-DMMC	3,4-dimethylmethcathinone
3-FMC	3-fluoromethcathinone
4-EMC	4-ethylmethcathinone; OR 4-ethyl-methcathinone
4-FMC, Flephedrone	4-fluoromethcathinone
4-MBC, Benzedrone	(±)-1-(4-methylphenyl)-2-(benzylamino)propan-1-one; OR 4-methyl-N-benzylcathinone; OR N-benzyl-4-methylcathinone; OR 1-(4-methylphenyl)-2-benzyla-minopropan-1-one
4-MEC	4-methyl-N-ethylcathinone; OR 4-methylethcathinone; OR para-methyl-N-ethylcathinone; OR para-methylethcathinone; OR 4-methyl-ethylcathinone
4-MeMABP	4-methylbuphedrone; OR (2-Methylamino-1-(4-methylphenyl)butan-1-one); OR 2-methylamino-1-(4-methylphenyl)butan-1-one
a-PBP, alpha-PBP	alpha-Pyrrolidinobutiophenone; OR a-Pyrrolidinobutiophenone; OR (RS)1-phenyl-2-(1-pyrrolidinyl)-1-pentanone
a-PPP, alpha-PPP	alpha-pyrrolidinopropiophenone; OR a-pyrrolidinopropiophenone
a-PVP, alpha-PVP	alpha-Pyrrolidinopentiophenone; OR a-Pyrrolidinopentiophenone; OR 1-phenyl-2-(1-pyrrolidinyl)-1-pentanone; OR alpha-pyrrolidinovalerophenone; OR a-pyrrolidinovalerophenone
BZ-6378 (sometimes used as another name for mephedrone)	4-methylephedrone
Buphedrone	a-methylamino-butyrophenone; OR 2-(methylamino)-1-phenylbutan-1-one; OR alpha-methylamino-butyrophenone
Butylone, bk-MBDB	beta-Keto-N-methylbenzodioxolylpropylamine; OR beta-Keto-N-methyl-3,4-benzodioxyolybutanamine
BZP	benzylpiperazine; OR N-benzylpiperazine
D2PM	diphenyl-2-pyrrolidinyl-methanol
Dimethocaine	(3-diethylamino-2,2-dimethylpropyl)-4-aminobenzoate
DMBDB, bk-DMBDB, dibutylone	1-(Benzo[d][1,3]dioxol-5-yl)-2-(dimethylamino)butan-1-one
DMEC	dimethylethcathinone
DMMC	dimethylmethcathinone

Ephedrone (sometimes used as another name for methcathinone)	2-(methylamino)-1-phenylpropan-1-one; OR 2-methylamino-1-phenylpropan-1-one
Ethcathinone	2-ethylamino-1-phenyl-propan-1-one
Ethylethcathinone	
Ethylmethcathinone	
Ethylone	3,4-methylenedioxy-N-ethylcathinone; OR 3,4-methylenedioxyethylcathinone; OR 3,4-methylenedioxy-ethylcathinone; OR 3,4-methylenedioxyethcathinone
Eutylone	beta-Keto-Ethylbenziodioxolylbutanamine
Fluorococaine	
Fluoroethcathinone	
Fluoroisocathinone	
Fluoromethcathinone	
HMMC	3-methoxymethcathinone
Isopentedrone	
MaPPP, 4-MePPP, MPPP	4-methyl-alpha-pyrrolidinopropiophenone; OR 4-methyl-a-pyrrolidinopropiophenone; OR methylpyrrolidinopropiophenone; OR Methyl-pyrrolindinopropiophenone
MBP	Methylbuphedrone
MBZP	1-methyl-4-benzylpiperazine
MDAI	methylenedioxy-aminoindane; OR 5,6-methylenedioxy-2-aminoindane
MDAT	6,7-methylenedioxy-2-aminotetralin
MDDMA	Dimethylone
MDMC	Methylenedioxymethcathinone
MDPBP	3,4-methylenedioxy-alpha-pyrrolidinobutiophenone; OR 3,4-methylenedioxy-a-pyrrolidinobutiophenone
MDPPP	3,4-methylenedioxy-a-pyrrolidinopropiophenone; OR (RS)-1-(3,4-methylenedioxyphenyl)-2-(1-pyrrolidinyl)-1-propanone; OR 3,4-methylenedioxy-alpha-pyrrolidinopropiophenone
MDPV, MDPK	3,4-methylenedioxypyrovalerone; OR methylenedioxypyrovalerone
MEC	Methylethcathinone
Mephedrone, 4-MMC	4-methylmethcathinone; OR 4-methylephedrone; OR (RS)-2-methylamino-1-(4-methylphenyl)propan-1-one
Metamfepramone, N,N-DMMC	N,N-dimethylcathinone
Methedrone, Bk-PMMA, PMMC	para-methoxymethcathinone; OR 4-methoxymethcathinone; OR methoxyphedrine; OR (RS)-1-(4-methoxyphenyl)-2-(methylamino)propan-1-one
Methylmethcathinone	

Methylone, bk-MDMA, MDMC	3,4-methylenedioxy-N-methylcathinone; OR 3,4-methylenedioxymethcathinone; OR 3,4-methylenedioxymethylcathinone
MOMC	Methoxymethcathinone
MOPPP	4-methoxy-alpha-pyrrolidinopropiophenone; OR 4-methoxy-a-pyrrolidinopropiophenone
MPBP	4-methyl-alpha-pyrrolidinobutyrophenone; OR 4-methyl-a-pyrrolidinobutryophenone; OR 4-methyl-alpha-pyrrolidinobutiophenone; OR 4-methyl-a-pyrrolidinobutiophenone
NRG-1, Naphyrone	naphthylpyrovalerone
NRG-2	
Pentedrone	a-methylamino-Valerophenone; OR 2-(methylamino)-1-phenyl-1-pentanone; OR 2-methylamino-1-phenyl-1-pentanone
Pentylone	beta-Keto-N-methylbenzodioxolylpentanamine; OR beta-keto-ethylbenzodioxolylpentanamine

Section Three. Other Novel Psychoactive Substances Model Language.

Substituted phenethylamines. This includes any compound, unless specifically excepted, specifically named in this schedule, or listed under a different schedule, structurally derived from phenylethan-2-amine by substitution on the phenyl ring in any of the following ways, that is to say, by substitution with a fused methylenedioxy ring, fused furan ring, or fused tetrahydrofuran ring; by substitution with two alkoxy groups; by substitution with one alkoxy and either one fused furan, tetrahydrofuran, or tetrahydropyran ring system; or by substitution with two fused ring systems from any combination of the furan, tetrahydrofuran, or tetrahydropyran ring systems.

Whether or not the compound is further modified in any of the following ways, that is to say:

(a) By substitution of phenyl ring by any halo, hydroxyl, alkyl, trifluoromethyl, alkoxy, or alkylthio groups;
(b) By substitution at the 2-position by any alkyl groups; or
(c) By substitution at the 2-amino nitrogen atom with alkyl, dialkyl, benzyl, hydroxybenzyl, methylenedioxybenzyl, or methoxybenzyl groups.

Examples include, but are not limited to, the following:

Trade or Other Name	Chemical Compound
2,5-DMA	2,5-dimethoxy-amphetamine; OR 2,5-dimethoxy-amethylphenethylamine
2C-B	2-(4-bromo-2,5-dimethoxyphenyl)ethanamine; OR 2,5-Dimethoxy-4-bromophenethylamine
2C-C	4-Chloro-2,5-dimethoxyphenethylamine; OR 1-(4-Chloro-2,5-dimethoxyphenyl)-2-aminoethane; OR 1-(4-Chloro-2,5-

	dimethoxyphenyl)-2-ethanamine; OR 2-(4-Chloro-2,5-dimethoxyphenyl)ethanamine; OR 2-(4-Chloro-2,5-dimethoxyphenyl)ethanamine
2C-D	2-(2,5-Dimethoxy-4-methylphenyl)ethanamine; OR 2,5-Dimethoxy-4-methylphenethylamine
2C-E	4-Ethyl-2,5-dimethoxyphenethylamine; OR 2,5-dimethoxy-4-ethylphenethylamine; OR 1-(2,5-Dimethoxy-4-ethylphenyl)-2-aminoethane; OR 2,5-Dimethoxy-4-ethyl-phenethylamine; OR 2-(2,5-Dimethoxy-4-ethylphenyl)ethanamine
2C-H	2-(2,5-Dimethoxyphenyl)ethanamine; OR 2,5-Dimethoxyphenethylamine
2C-I	4-Iodo-2,5-dimethoxyphenethylamine; OR 2,5-dimethoxy-4-iodophenethylamine; OR 2-(4-Iodo-2,5-dimethoxyphenyl)ethanamine; OR 4-iodo-2,5-dimethoxy-beta-phenylethylamine
2C-N	2-(2,5-Dimethoxy-4-nitro-phenyl)ethanamine; OR 2-(2,5-Dimethoxy-4-nitrophenyl)ethanamine; OR 2,5-Dimethoxy-4-nitrophenethylamine
2C-P	2-(2,5-Dimethoxy-4-(n)-propylphenyl)ethanamine; OR 2,5-Dimethoxy-4-propylphenethylamine
2C-T	2-(2,5-dimethoxy-4-(methylthio)phenyl)ethanamine; OR 4-methylthio-2,5-dimethoxyphenethylamine
2C-B-butterFLY	2-(10-Bromo-2,3,4,7,8,9-hexahydropyrano[2,3-g]chromen-5-yl)ethanamine
2C-B-FLY	2-(8-bromo-2,3,6,7-tetrahydrofuro [2,3-f][1]benzofuran-4-yl)ethanamine
2C-B-hemiFLY, 2CB-5-hemiFLY	2-(7-Bromo-5-methoxy-2,3-dihydro-1-benzofuran-4-yl)ethanamine
2C-B-FLY-NBOMe	N-(2-Methoxybenzyl)-1-(8-bromo-2,3,6,7-tetrahydrobenzo[1,2-b:4,5-b']difuran-4-yl)-2-aminoethane
2C-B-NBOMe, 2,5B-NBOMe	2-(4-bromo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-bromo-N-(2-methoxybenzyl)phenethylamine
2CBCB-NBOMe	N-(2-methoxybenzyl)-1-[(7R)-3-bromo-2,5-dimethoxybicyclo[4.2.0]octa-1,3,5-trien-7-yl]methanamine
2C-C-NBOMe, 2,5C-NBOMe	2-(4-chloro-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-chloro-N-(2-methoxybenzyl)phenethylamine
2C-H-NBOMe, 2,5H-NBOMe	2-(2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine
2C-I-NBOH, 2,5I-NBOH	N-(2-Hydroxybenzyl)-4-iodo-2,5-dimethoxyphenethylamine
2C-I-NBOMe, 2,5INBOMe, 2,5I-NBOMe, 25I-NBOMe, NBOMe-2C-I, BOM-CI	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine; OR 2,5-Dimethoxy-4-iodo-N-(2-methoxybenzyl)phenethylamine

2C-T-2	2,5-Dimethoxy-4-ethylthiophenethylamine; OR 2-[4-(Ethylthio)-2,5-dimethoxyphenyl]ethanamine
2C-T-4	2,5-Dimethoxy-4-isopropylthiophenethylamine; OR 2-[4-(Isopropylthio)-2,5-dimethoxyphenyl]ethanamine
2C-T-7	2,5-Dimethoxy-4-(n)-propylthiophenethylamine; OR 2, 5-Dimethoxy-4-(n)-propylthiophenethylamine; OR 2,5-dimethoxy-4(n) propylthiophenethylamine
2C-TFM-NBOMe	2-(4-trifluoromethyl-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine
25I-NBF	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2-fluorophenyl)methyl]ethanamine
25I-NBMD, NBMD-2C-I, Cimbi-29	2-(4-iodo-2,5-dimethoxyphenyl)-N-[(2,3-methylenedioxyphenyl)methyl]ethanamine
3C-B-FLY	2-(4-bromo-2,3,6,7-tetrahydrofurobensofuran-8-yl)-1-methyl-ethylamine
4-CAB, AEPCA	4-Chlorophenylisobutylamine; OR 1-(4-chlorophenyl)butan-2-amine; OR 4-chloro-α-ethylphenethylamine
4-FA, PAL-303, Flux, Flits, R2D2	para-fluoroamphetamine; OR 4-fluoroamphetamine; OR (RS)-1-(4-Fluorophenyl)propan-2-amine
5-APB	5-(2-Aminopropyl)benzofuran
5-APDB	5-(2-Aminopropyl)-2,3-dihydrobenzofuran
6-APB; Benzofury	6-(2-aminopropyl)benzofuran; OR 1-benzofuran-6-ylpropan-2-amine
6-APDB	6-(2-Aminopropyl)-2,3,-dihydrobenzofuran
APB	((2-aminopropyl)benzofuran); OR [(2-aminopropyl)benzofuran]; OR (2-aminopropyl)benzofuran
APDB	((2-aminopropyl)-2,3-dihydrobenzofuran); OR [(2-aminopropyl)-2,3-dihydrobenzofuran]; OR (2-aminopropyl)-2,3-dihydrobenzofuran
bromo-dragonFLY	1-(4-Bromofuro[2,3-f][1]benzofuran-8-yl)propan-2-amine; OR bromo-benzodifuranyl-isopropylamine
DOB	2,5-Dimethoxy-4-bromoamphetamine; OR 1-(4-Bromo-2,5-dimethoxyphenyl)-2-aminopropane
DOC	2,5-Dimethoxy-4-chloroamphetamine; OR 1-(4-chloro-2,5-dimethoxy-phenyl)propan-2-amine; OR 4-chloro-2,5-dimethoxyamphetamine
DOET	2,5-dimethoxy-4-ethylamphetamine
DOI	2,5-dimethoxy-4-iodoamphetamine; OR 1-(2,5-dimethoxy-4-iodophenyl)-propan-2-amine; OR 4-iodo-2,5-dimethoxyamphetamine
DOM, STP	4-methyl-2,5-dimethoxy-amphetamine; OR 4-methyl-2,5-dimethoxy-a-methylphenethylamine
Fluoroamphetamine	
MDA	3,4-methylenedioxy amphetamine
MDMA	3,4-methylenedioxymethamphetamine

MDE, MDEA	3,4-methylenedioxy-N-ethylamphetamine; OR N-ethylalpha-methyl-3,4(methylenedioxy)phenethylamine
Mescaline	3,4,5-trimethoxyphenethylamine
Mescaline-NBOMe	N-(2-Methoxybenzyl)-2-(3,4,5-trimethoxyphenyl)ethanamine; OR 3,4,5-trimethoxy-N-(2-methoxybenzyl)phenethylamine
MMDA	5-methoxy-3,4-methylenedioxy-amphetamine
N,N-dimethylamphetamine	
PMMA, 4-MMA	para-Methoxy-N-methylamphetamine; OR 4-methoxy-N-methylamphetamine; OR 1-(4-methoxyphenyl)-N-methyl-propan-2-amine
TMA	3,4,5-trimethoxyamphetamine

Substituted tryptamines. This includes any compound, unless specifically excepted, specifically named in this schedule, or listed under a different schedule, structurally derived from 2-(1H-indol-3-yl)ethanamine (i.e., tryptamine) by mono- or di-substitution of the amine nitrogen with alkyl or alkenyl groups or by inclusion of the amino nitrogen atom in a cyclic structure whether or not the compound is further substituted at the alphaposition with an alkyl group or whether or not further substituted on the indole ring to any extent with any alkyl, alkoxy, halo, hydroxyl, or acetoxy groups. Examples include, but are not limited to, the following:

Trade or Other Name	Chemical Compound
4-AcO-DET	3-(2-Diethylaminoethyl)-1H-indol-4-yl acetate
4-AcO-DMT, OAcetylpsilocin	4-acetoxy-N,N-dimethyltryptamine
4-AcO-DPT	4-acetoxy-N,N-dipropyltryptamine
4-HO-DiPT	4-Hydroxy-di-isopropyl-tryptamine; OR 3-[2-(diisopropylamino)ethyl]-1H-indol-4-ol; OR 4-Hydroxy-N,N-diisopropyltryptamine
4-HO-MET	4-hydroxy-N-methyl-N-ethyltryptamine
4-HO-MiPT	3-(2-[Isopropyl(methyl)amino]ethyl)-1H-indol-4-ol
4-HO-MPMI	(R)-3-(N-methylpyrrolidin-2-ylmethyl)-4-hydoxyindole
4-HO-MPT	3-{2-[methyl(propyl)amino]ethyl}-1H-indol-4-ol; OR 4-hydroxy-N-methyl-N-propyltryptamine
4-MeO-MiPT	4-methoxy-N-methyl-N-isopropyltryptamine; OR 3-[2-(Isopropylmethylamino)ethyl]-4-methoxyindole
4-methyl-aET	4-Methyl-α-ethyltryptamine; OR 1-ethyl-2-(4-methyl-1H-indol-3-yl)-ethylamine
5-MeO-AMT	1-(5-methoxy-1H-indol-3-yl)propan-2-amine
5-MeO-DALT	N,N-diallyl-5-methoxytryptamine; OR N-allyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]prop-2-en-1-amine
5-MeO-DET	N,N-Dethyl-5-Methoxytryptamine
5-MeO-DiPT	5-methoxy-diisopropyltryptamine; OR 3-[2-(Diisopropylamino)ethyl]-5-methoxyindole; OR 5-methoxy-N, N-diisopropyltryptamine

5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine; OR 2-(5-methoxy-1H-indol-3-yl)-N,N-dimethylethanamine; OR 5-methoxy-N,N-dimethyltryptamine; OR 5-methoxy-N,N-dimethyltryptamine; OR 5-methoxy-3-2[2-(dimethylamino)ethyl]indole
5-MeO-DPT	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-propylpropan-1-amine
5-MeO-MiPT, Moxy, Moxie	N-[2-(5-methoxy-1H-indol-3-yl)ethyl]-N-methylpropan-2-amine
5-MeO-MPMI	(R)-3-(N-methylpyrrolidin-2-ylmethyl)-5-methoxyindole
Bufotenine	3-(Beta-Dimethyl-aminoethyl)-5-hydroxyindole; OR 3-(2-dimethylaminoethyl)-5-indolol; OR N,N-dimethylserotonin; 5-hydroxy-N,N-dimethyltryptamine
DET	Diethyltryptamine; OR N,N-Diethyltryptamine
DiPT	N,N-Diisopropyltryptamine; OR Diisopropyltryptamine; OR N,N-diisopropyltryptamine; OR 3-[2-(diisopropylamino)ethyl]indole
DMT	Dimethyltryptamine
DPT	N,N-Dipropyltryptamine; OR Dipropyltryptamine; OR 3-[2-(dipropylamino)ethyl]indole
Methyltryptamine, NMT	N-methyltryptamine; OR 2-(1H-Indol-3-yl)-N-methylethanamine
MiPT	N-isopropyl-N-methyltryptamine
Psilocyn	

Unclassified novel psychoactive substances include the following:

Trade or Other Name	Chemical Compound
2-AI, 2-aminoindane	2,3-dihydro-1H-inden-2-amine
2-FMA	2-fluoromethamphetamine; OR (RS)-1-(2-fluorophenyl)-N-methylpropan-2-amine
2-MeO-ketamine	methoxyketamine
3-HO-PCE	3-[1-(ethylamino)cyclohexyl]phenol
3-HO-PCP	3-hydroxyphencyclidine
3-MeO-PCE	3-Methoxyeticyclidine
3-MeO-PCP	1-[1-(3-methoxyphenyl)cyclohexyl]-piperidine; OR 3-methoxyphencyclidine
4-FMA	4-fluoromethamphetamine; OR (RS)-1-(4-fluorophenyl)-N-methylpropan-2-amine
4-MeO-PCP, methoxydine	4-Methoxyphencyclidine; OR 1-[1-(4-methoxyphenyl)cyclohexyl]-piperidine
4-MePPP	4-methyl-a-pyrrolidinohexphenone
5-IAI	5-Iodo-2-aminoindane; OR 5-iodo-2,3-dihydro-1H-inden-2-amine
5-ME	5-methyl-ethylone

BTCP	Benzothiophenylcyclohexylpiperidine
DBP, DBZP	1,4-Dibenzylpiperazine
Ethyl-ketamine	2-(2-chlorophenyl)-2-(ethylamino)cyclohexanone
Fluoromethamphetamine	
Fluorophenylpiperazine; pFPP; 4-FPP; fluoperazine; flipiperazine	Para-fluorophenylpiperazine; OR 1-(4-fluorophenyl)piperazine
Kratom	7-hydroxymitragynine
MCPP	1-(3-Chlorophenyl)piperazine, OR Chlorophenylpiperazine, OR meta-chlorophenylpiperazine; OR 1-(3-chlorophenyl)piperazine; OR 3-chlorophenylpiperazine
Methiopropamine, MPA	1-(thiophen-2-yl)-2-methylaminopropane
Methoxetamine, MXE, 3-MeO-2-Oxo-PCE	(RS)2-(3-methoxyphenyl)-2-(ethylamino)cyclohexanone
MPHP	Methyl-alpha-pyrrolidinohexiophenone; OR Methyl-pyrrolidino-hexanophenone
O-desmethyltramadol, O-DT	3-[2-(1-Amino-1-methylethyl)-1-hydroxycyclohexyl]phenol
Phenazepam	7-Bromo-5-(2-chlorophenyl)-1,3-dihydro-2H-1,4-benzodiazepin-2-one
pMeOPP, MeOPP	1-(4-Methoxyphenyl)piperazine
pTFMPP	1-[4-(trifluoromethylphenyl)]piperazine
TFMPP	3-trifluoromethylphenylpiperazine; OR 1-[3-(trifluoromethyl)phenyl]piperazine; OR 1-(3-trifluoromethylphenyl) piperazine; OR 1-(3-trifluoromethylphenyl)piperazine; OR 1-(3-[trifluoromethylphenyl])piperazine