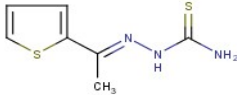
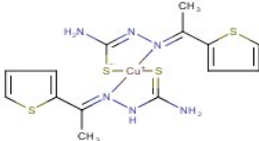
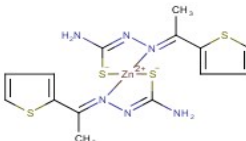
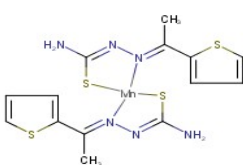
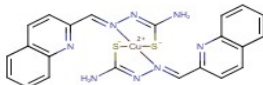
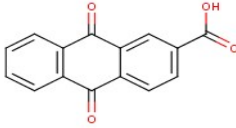
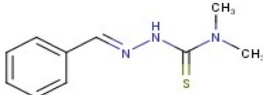
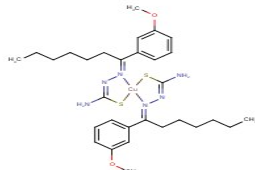
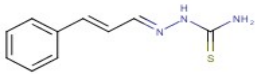
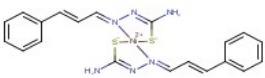
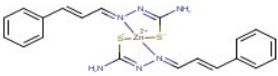
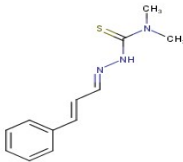
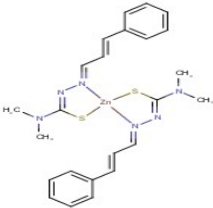
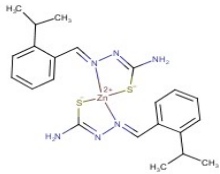
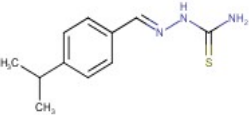
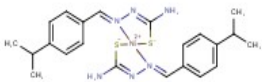
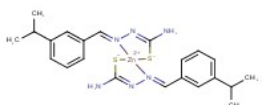
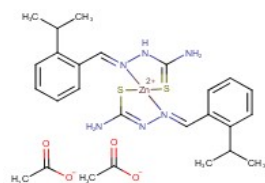


Table 2S

Compounds effective in inhibiting aflatoxin accumulation more than 50% at the concentration 50 $\mu$ M					
Compound	Structure	MW	Formula	Group	A.I. (%)
2-acetylthiophene thiosemicarbazone		199,29	C7H9N3S2	2-Acetylthiophene	58,3
Cu(II) 2-acetylthiophene bisthiosemicarbazone		461,12	C14H17CuN6S4	2-Acetylthiophene	56,5
Zn(II) 2-acetylthiophene bisthiosemicarbazone		461,94	C14H16N6S4Zn	2-Acetylthiophene	60,4
Mn(II) 2-acetylthiophene bisthiosemicarbazone		451,50	C14H16MnN6S4	2-Acetylthiophene	61,0
Cu(II) Quinoline carboxaldehyde bisthiosemicarbazone		522,11	C22H18CuN8S2	2-Quinolinecarboxaldehyde	55,7
Anthraquinone-2- carboxylic acid		252,23	C15H8O4	Anthraquinone	56,0
benzaldehyde 4,4'-dimethyl thiosemicarbazone		207,30	C10H13N3S	Benzaldehyde	76,0
Cu(II) 1-(3-methoxyphenyl)heptan- 1-one bisthiosemicarbazone		648,39	C30H44CuN6O2S2	Benzaldehyde	82,5

Cinnamaldehyde thiosemicarbazone		205,28	C10H11N3S	Cinnamaldehyde	73,1
Ni(II) Cinnamaldehyde bisthiosemicarbazone		467,24	C20H20N6NiS2	Cinnamaldehyde	95,0
Zn(II) Cinnamaldehyde bisthiosemicarbazone		473,92	C20H20N6S2Zn	Cinnamaldehyde	99,0
Cinnamaldehyde 4,4-dimethyl thiosemicarbazone		233,33	C12H15N3S	Cinnamaldehyde	100
Zn(II) Cinnamaldehyde bis 4,4-dimethyl thiosemicarbazone		530,03	C24H28N6S2Zn	Cinnamaldehyde	75,0
Zn(II) 1- isopropylbenzaldehyde bisthiosemicarbazone		506,01	C22H28N6S2Zn	Cuminaldehyde	55,3
Cuminaldehyde thiosemicarbazone		221,32	C11H15N3S	Cuminaldehyde	100
Ni(II) Cuminaldehyde bisthiosemicarbazone		499,32	C22H28N6NiS2	Cuminaldehyde	91,5
Zn(II) 2- isopropylbenzaldehyde bisthiosemicarbazone		506,01	C22H28N6S2Zn	Cuminaldehyde	93,8

Zn(II) 1-  
isopropylbenzaldehyde  
bis thiosemicarbazone  
diacetate



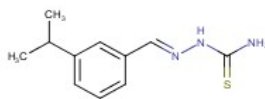
625,10

C26H35N6O4S2Zn

Cuminaldehyde

69,3

2-isopropylbenzaldehyde  
thiosemicarbazone



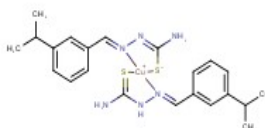
221,32

C11H15N3S

Cuminaldehyde

67,0

Cu(II) 2-  
isopropylbenzaldehyde  
bisthiosemicarbazone



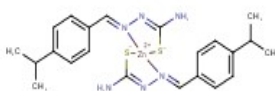
505,18

C22H29CuN6S2

Cuminaldehyde

65,9

Zn(II) Cuminaldehyde  
bisthiosemicarbazone



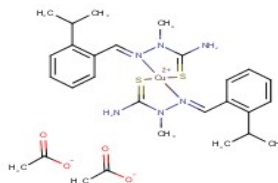
506,01

C22H28N6S2Zn

Cuminaldehyde

97,1

Cu(II) 2-isopropyl  
benzaldehyde-2-methyl-  
thiosemicarbazone di  
acetate



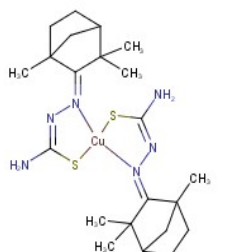
652,33

C28H40CuN6O4S2

Cuminaldehyde

71,4

Cu(II) fenchone  
bisthiosemicarbazone



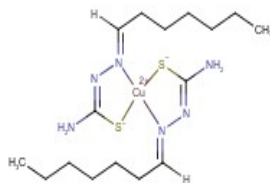
512,24

C22H36CuN6S2

Fenchone

62,0

Cu(II) heptanal  
bisthiosemicarbazone



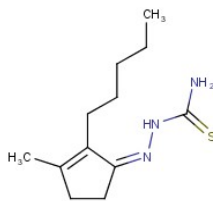
436,14

C16H32CuN6S2

Heptanal

62,8

Dihydrojasmane  
thiosemicarbazone

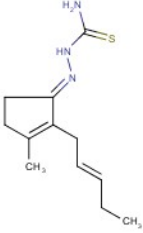
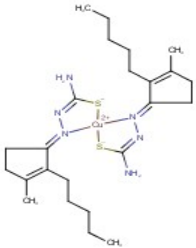
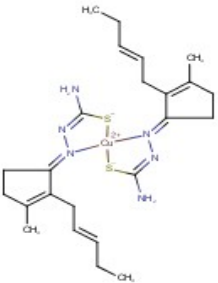
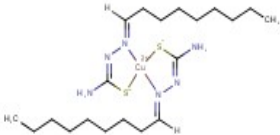
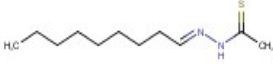
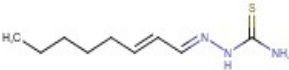
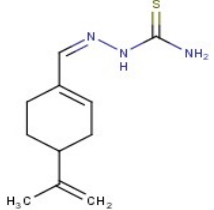


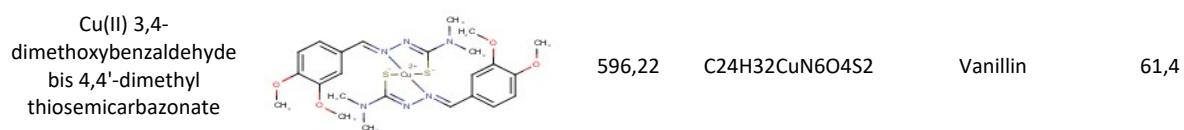
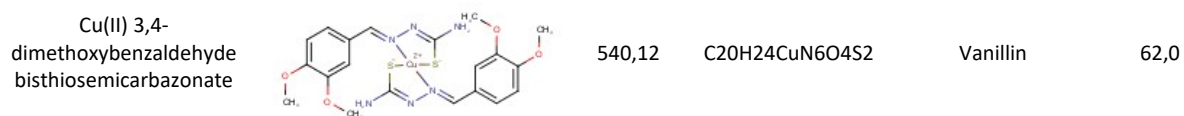
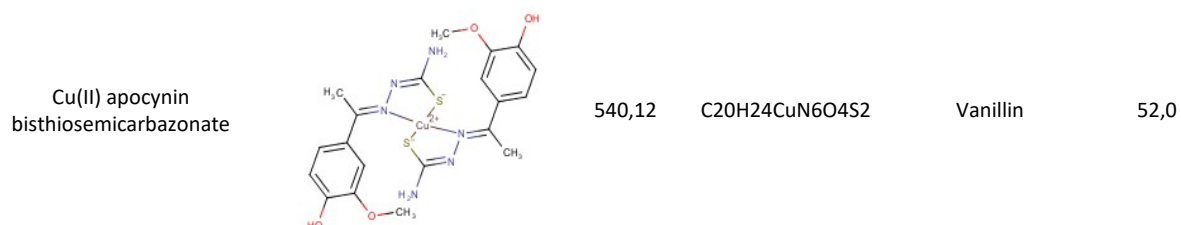
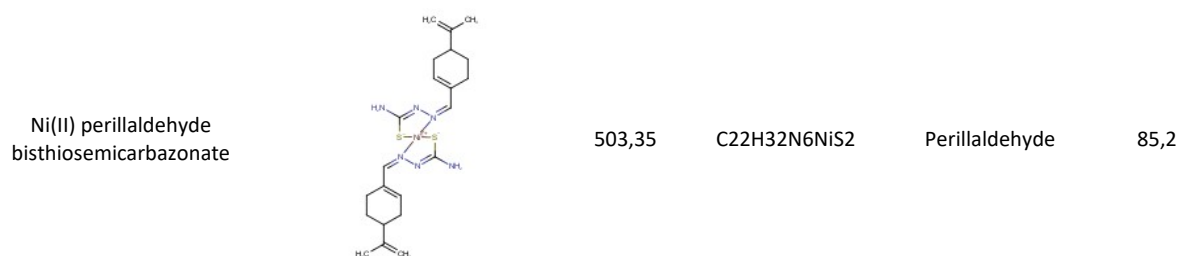
239,38

C12H21N3S

Jasmone

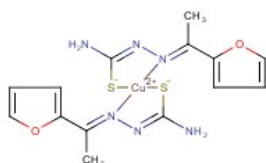
51,5

Jasmone thiosemicarbazone		237,37	C12H19N3S	Jasmone	88,0
Cu(II) Dihydrojasmone bisthiosemicarbazonate		540,29	C24H40CuN6S2	Jasmone	66,0
Cu(II) jasmone bisthiosemicarbazonate		536,26	C24H36CuN6S2	Jasmone	78,0
Cu(II) nonanal bisthiosemicarbazonate		492,25	C20H40CuN6S2	Nonanal	90,0
Nonanal thiosemicarbazone		214,37	C11H22N2S	Nonanal	91,0
Octanal thiosemicarbazone		199,32	C9H17N3S	Octanal	76,0
Perillaldehyde thiosemicarbazone		223,34	C11H17N3S	Perillaldehyde	78,0



Compounds effective in inhibiting aflatoxin accumulation more than 50% at the concentration 100 µM					
Compound	Structure	MW	Formula	Group	A.I. (%)
2-acetylthiophene thiosemicarbazone		199,29	C7H9N3S2	2- Acetylthiophene	88,4

Cu(II) 2-acetylfurane  
bisthiosemicarbazonate



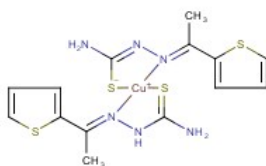
427,99

C14H16CuN6O2S2

2-  
Acetylthiophene

65,7

Cu(II) 2-acetylthiophene  
bisthiosemicarbazonate



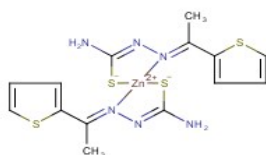
461,12

C14H17CuN6S4

2-  
Acetylthiophene

88,6

Zn(II) 2-acetylthiophene  
bisthiosemicarbazonate



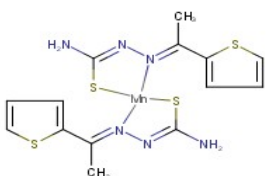
461,94

C14H16N6S4Zn

2-  
Acetylthiophene

85,4

Cu(II) acetylthiophene  
bisthiosemicarbazonate



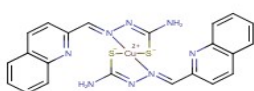
451,50

C14H16MnN6S4

2-  
Acetylthiophene

92,0

Cu(II) Quinoline  
carboxaldehyde  
bisthiosemicarbazonate



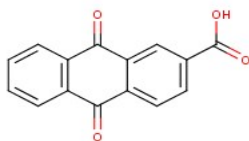
522,11

C22H18CuN8S2

2-Quinoline  
carboxaldehyde

88,0

Anthraquinone-2-  
carboxylic acid



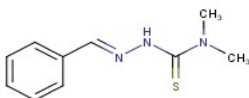
252,23

C15H8O4

Anthraquinone

80,0

Benzaldehyde  
4,4'-dimethyl  
thiosemicarbazone



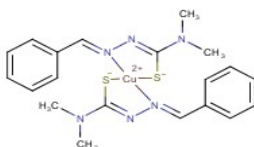
207,30

C10H13N3S

Benzaldehyde

90,0

Cu(II) benzaldehyde  
4,4'-dimethyl  
thiosemicarbazonate



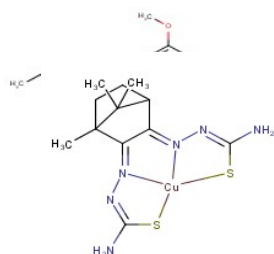
476,12

C20H24CuN6S2

Benzaldehyde

67,0

Cu(II) 1-(3-  
methoxyphenyl)  
heptan-1-one  
bisthiosemicarbazonate



648,39

C30H44CuN6O2S2

Benzaldehyde

95,2

Cu(II) Camphorquinone  
bisthiosemicarbazone

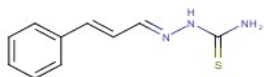
373,98

C<sub>12</sub>H<sub>18</sub>CuN<sub>6</sub>S<sub>2</sub>

Camphorquinone

53,0

Cinnamaldehyde  
thiosemicarbazone



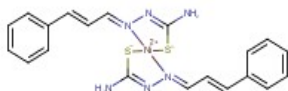
205,28

C<sub>10</sub>H<sub>11</sub>N<sub>3</sub>S

Cinnamaldehyde

79,0

Ni(II) Cinnamaldehyde  
bisthiosemicarbazone



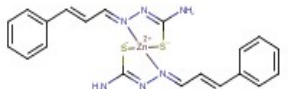
467,24

C<sub>20</sub>H<sub>20</sub>N<sub>6</sub>NiS<sub>2</sub>

Cinnamaldehyde

100

Zn(II) Cinnamaldehyde  
bisthiosemicarbazone



473,92

C<sub>20</sub>H<sub>20</sub>N<sub>6</sub>S<sub>2</sub>Zn

cinnamaldehyde

100

Cinnamaldehyde  
4,4-dimethyl  
thiosemicarbazone

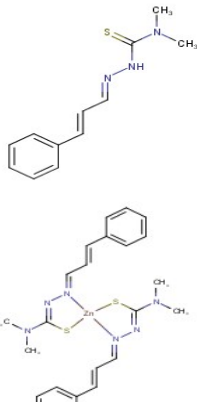
233,33

C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>S

cinnamaldehyde

100

Zn(II) Cinnamaldehyde  
bis 4,4-dimethyl  
thiosemicarbazone



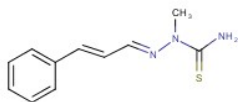
530,03

C<sub>24</sub>H<sub>28</sub>N<sub>6</sub>S<sub>2</sub>Zn

Cinnamaldehyde

100

Cinnamaldehyde  
2-methyl  
thiosemicarbazone



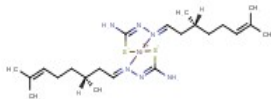
219,31

C<sub>11</sub>H<sub>13</sub>N<sub>3</sub>S

Cinnamaldehyde

64,0

Ni(II) citronellal  
bisthiosemicarbazone



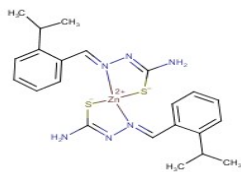
511,42

C<sub>22</sub>H<sub>40</sub>N<sub>6</sub>NiS<sub>2</sub>

Citronellal

82,1

Zn(II) 1-  
isopropylbenzaldehyde  
bisthiosemicarbazonate



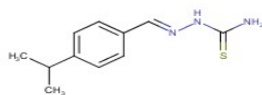
506,01

C<sub>22</sub>H<sub>28</sub>N<sub>6</sub>S<sub>2</sub>Zn

Cuminaldehyde

100

Cuminaldehyde  
thiosemicarbazone



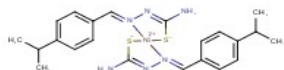
221,32

C<sub>11</sub>H<sub>15</sub>N<sub>3</sub>S

Cuminaldehyde

100

Ni(II) Cuminaldehyde  
bisthiosemicarbazonate



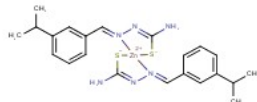
499,32

C<sub>22</sub>H<sub>28</sub>N<sub>6</sub>NiS<sub>2</sub>

Cuminaldehyde

96,0

Zn(II) 2-  
isopropylbenzaldehyde  
bisthiosemicarbazonate



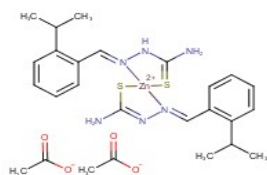
506,01

C<sub>22</sub>H<sub>28</sub>N<sub>6</sub>S<sub>2</sub>Zn

Cuminaldehyde

100

Zn(II) 1-  
isopropylbenzaldehyde  
bis thiosemicarbazone  
diacetate



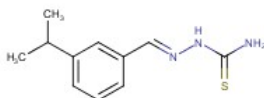
625,10

C<sub>26</sub>H<sub>35</sub>N<sub>6</sub>O<sub>4</sub>S<sub>2</sub>Zn

Cuminaldehyde

81,9

2-isopropylbenzaldehyde  
thiosemicarbazone



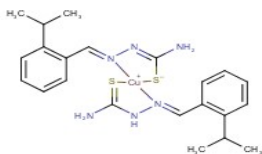
221,32

C<sub>11</sub>H<sub>15</sub>N<sub>3</sub>S

Cuminaldehyde

97,0

Cu(II) 1-  
isopropylbenzaldehyde  
bisthiosemicarbazonate



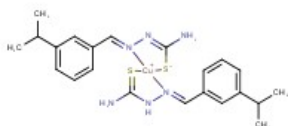
505,18

C<sub>22</sub>H<sub>29</sub>CuN<sub>6</sub>S<sub>2</sub>

Cuminaldehyde

73,5

Cu(II) 2-  
isopropylbenzaldehyde  
bisthiosemicarbazonate



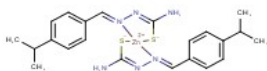
505,18

C<sub>22</sub>H<sub>29</sub>CuN<sub>6</sub>S<sub>2</sub>

Cuminaldehyde

80,8

Zn(II) Cuminaldehyde  
bisthiosemicarbazonate



506,01

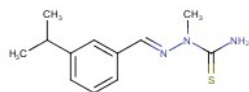
C<sub>22</sub>H<sub>28</sub>N<sub>6</sub>S<sub>2</sub>Zn

Cuminaldehyde

100



3-isopropyl  
benzaldehyde-2-methyl-  
thiosemicarbazone



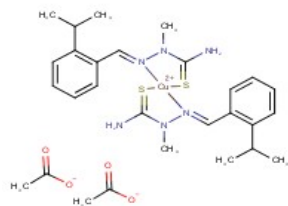
235,35

C<sub>12</sub>H<sub>17</sub>N<sub>3</sub>S

Cuminaldehyde

62,7

Cu(II) 2-isopropyl  
benzaldehyde-2-methyl-  
thiosemicarbazone di  
acetate



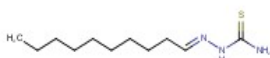
652,33

C<sub>28</sub>H<sub>40</sub>CuN<sub>6</sub>O<sub>4</sub>S<sub>2</sub>

Cuminaldehyde

86,7

Decanal  
thiosemicarbazone



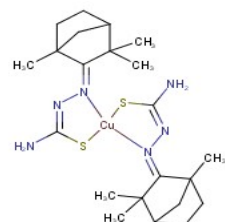
229,39

C<sub>11</sub>H<sub>23</sub>N<sub>3</sub>S

Decanal

62,0

Cu(II) fenchone  
bisthiosemicarbazone



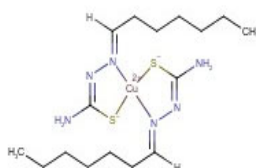
512,24

C<sub>22</sub>H<sub>36</sub>CuN<sub>6</sub>S<sub>2</sub>

Fenchone

84,0

Cu(II) heptanal  
bisthiosemicarbazone



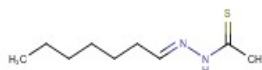
436,14

C<sub>16</sub>H<sub>32</sub>CuN<sub>6</sub>S<sub>2</sub>

Heptanal

85,5

Heptanal  
thiosemicarbazone



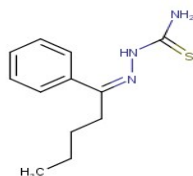
186,32

C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>S

Heptanal

51,0

Valerophenone  
thiosemicarbazone



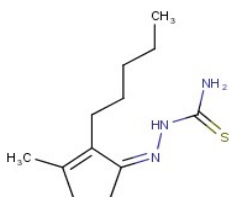
235,35

C<sub>12</sub>H<sub>17</sub>N<sub>3</sub>S

Valerophenone

55,0

Dihydrojasmane  
thiosemicarbazone



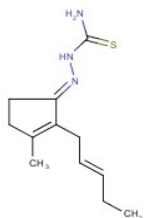
239,38

C<sub>12</sub>H<sub>21</sub>N<sub>3</sub>S

Jasmone

63,2

Jasmone  
thiosemicarbazone



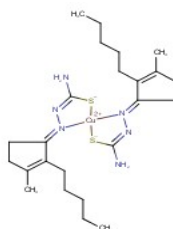
237,37

C<sub>12</sub>H<sub>19</sub>N<sub>3</sub>S

Jasmone

90,0

Cu(II) Dihydrojasmone  
bisthiosemicarbazone



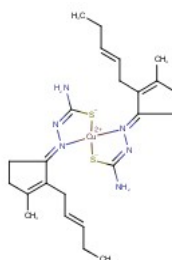
540,29

C<sub>24</sub>H<sub>40</sub>CuN<sub>6</sub>S<sub>2</sub>

Jasmone

80,0

Cu(II) jasmone  
bisthiosemicarbazone



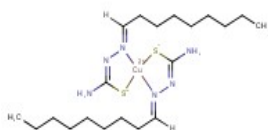
536,26

C<sub>24</sub>H<sub>36</sub>CuN<sub>6</sub>S<sub>2</sub>

Jasmone

97,0

Cu(II) nonanal  
bisthiosemicarbazone



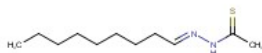
492,25

C<sub>20</sub>H<sub>40</sub>CuN<sub>6</sub>S<sub>2</sub>

Nonanal

100

Nonanal  
thiosemicarbazone



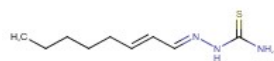
214,37

C<sub>11</sub>H<sub>22</sub>N<sub>2</sub>S

Nonanal

100

Octanal  
thiosemicarbazone



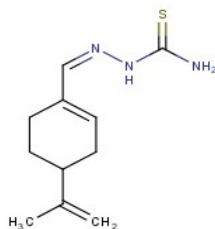
199,32

C<sub>9</sub>H<sub>17</sub>N<sub>3</sub>S

Octanal

96,0

Perillaldehyde  
thiosemicarbazone



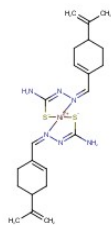
223,34

C<sub>11</sub>H<sub>17</sub>N<sub>3</sub>S

Perillaldehyde

87,3

Ni(II) Perillaldehyde  
bisthiosemicarbazonate



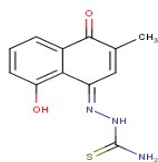
503,35

C<sub>22</sub>H<sub>32</sub>N<sub>6</sub>NiS<sub>2</sub>

Perillaldehyde

90,1

Plumbagin  
thiosemicarbazone



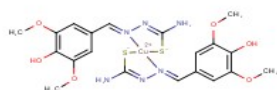
261,30

C<sub>12</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>S

Plumbagin

83,0

Cu(II) syringaldehyde  
bisthiosemicarbazonate



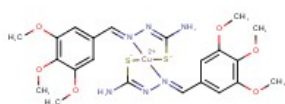
572,11

C<sub>20</sub>H<sub>24</sub>CuN<sub>6</sub>O<sub>6</sub>S<sub>2</sub>

Syringaldehyde

61,0

Cu(II) 3,4,5-  
trimethoxybenzaldehyde  
bisthiosemicarbazonate



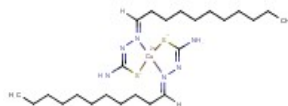
600,17

C<sub>22</sub>H<sub>28</sub>CuN<sub>6</sub>O<sub>6</sub>S<sub>2</sub>

Syringaldehyde

76,0

Cu(II)undecanal  
bisthiosemicarbazonate



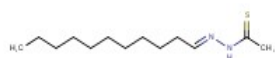
548,36

C<sub>24</sub>H<sub>48</sub>CuN<sub>6</sub>S<sub>2</sub>

Undecanal

96,0

Undecanal  
thiosemicarbazone



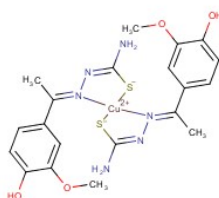
242,43

C<sub>13</sub>H<sub>26</sub>N<sub>2</sub>S

Undecanal

93,0

Cu(II) apocynin  
bisthiosemicarbazonate



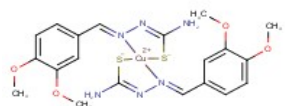
540,12

C<sub>20</sub>H<sub>24</sub>CuN<sub>6</sub>O<sub>4</sub>S<sub>2</sub>

Vanillin

72,0

Cu(II) 3,4-  
dimethoxybenzaldehyde  
bisthiosemicarbazonate



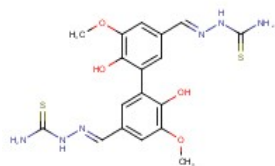
540,12

C<sub>20</sub>H<sub>24</sub>CuN<sub>6</sub>O<sub>4</sub>S<sub>2</sub>

Vanillin

80,0

Bisvanillin  
thiosemicarbazone



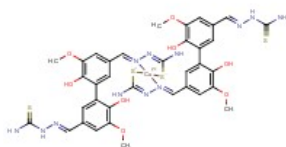
448,52

C<sub>18</sub>H<sub>20</sub>N<sub>6</sub>O<sub>4</sub>S<sub>2</sub>

Vanillin

61,0

Cu(II) bisvanillin  
thiosemicarbazone



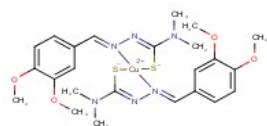
958,56

C<sub>36</sub>H<sub>38</sub>CuN<sub>12</sub>O<sub>8</sub>S<sub>4</sub>

Vanillin

77,0

Cu(II) 3,4-  
dimethoxybenzaldehyde  
bis 4,4'-dimethyl  
thiosemicarbazone



596,22

C<sub>24</sub>H<sub>32</sub>CuN<sub>6</sub>O<sub>4</sub>S<sub>2</sub>

Vanillin

84,6