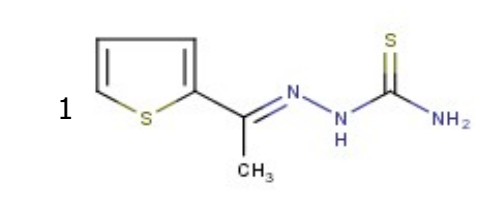
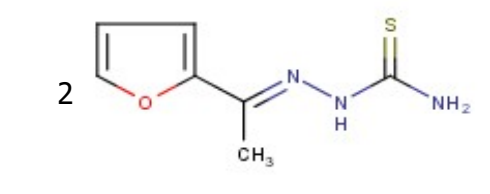
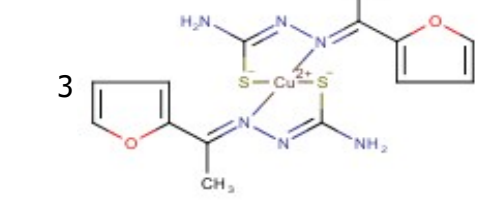
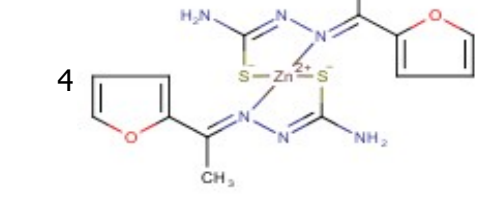
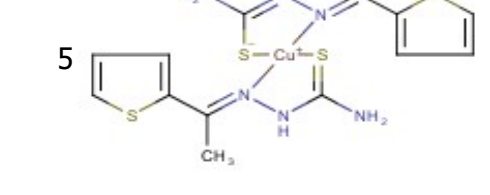
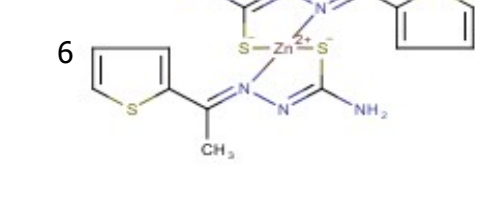
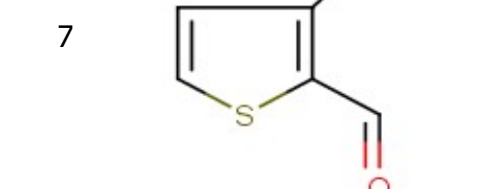
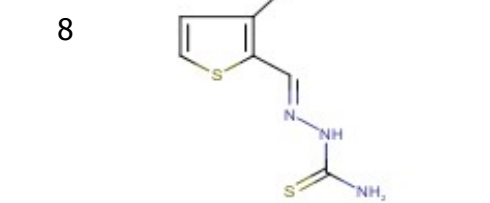
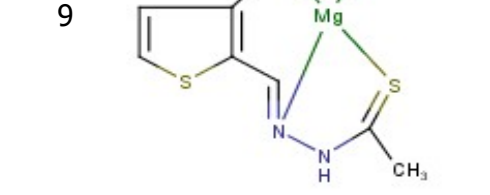
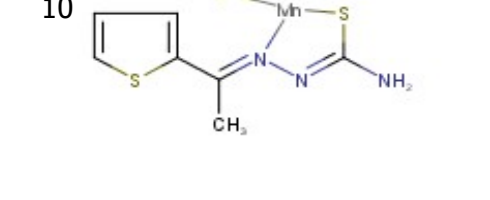
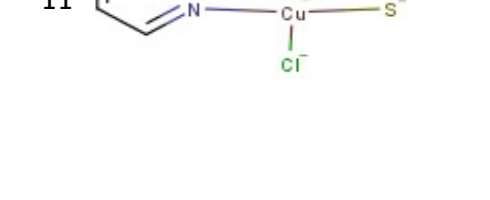
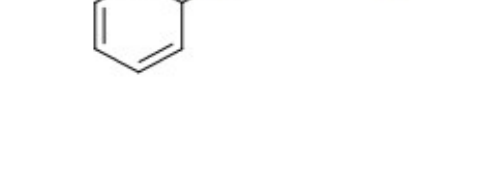
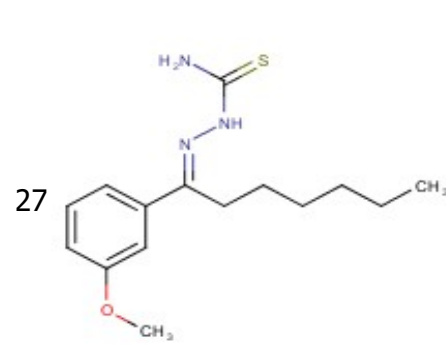


| Cldd | Structure                                                                           | Mol Weight | Formula        | LogP | LogD | TPSA   | H bond acce | H bond donors | Group                         | growth inhibition (%) - 50uM | growth inhibiti | AF inhibition 5 | AF inhibition 100 | CRL1790 (GI50) | GI50   | HS27 (GI50) | HFL1 (GI50) | U937 (G | COMET 1h (genotoxicity) | COMET 24h (genotoxicity) | Ames (mutagenesis) | EC50 Allium cepa (uM) | Mitotic index reduction | Genotoxicity | Micronucleus Allium | Genotoxicity Chromosomal aberration | Allium cepa (u |
|------|-------------------------------------------------------------------------------------|------------|----------------|------|------|--------|-------------|---------------|-------------------------------|------------------------------|-----------------|-----------------|-------------------|----------------|--------|-------------|-------------|---------|-------------------------|--------------------------|--------------------|-----------------------|-------------------------|--------------|---------------------|-------------------------------------|----------------|
|      |                                                                                     |            | C7H9N3S2       |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             | yes     | no                      |                          | Not mutagen        |                       |                         |              |                     |                                     |                |
| 1    |    | 199.29     |                | 1.42 | 1.42 | 50.41  | 1           | 2             |                               | 22.20                        | 35.70           | 58.30           | 88.40             | 101.00         | 101.00 | 101.00      | 101.00      |         |                         |                          |                    | 100.00                | 101.00                  |              | 25.00               |                                     |                |
|      |                                                                                     |            | C7H9N3OS       |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 2    |    | 183.23     |                | 0.57 | 0.57 | 63.55  | 1           | 2             |                               | 13.9                         | 35.9            | 19.06           | 28.44             |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C14H16CuN6O2S2 |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 3    |    | 427.99     |                |      |      | 141.46 | 0           | 0             |                               | 41.08                        | 63.42           | 47.49           | 65.71             | 10.00          | 33.50  | 25.00       | 101.00      |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C14H16N6O2S2Zn |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 4    |    | 429.82     |                |      |      | 141.46 | 0           | 0             |                               | 13.31                        | 19.00           | 34.48           | 48.04             |                | 30.50  |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C14H17CuN6S4   |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 5    |    | 461.12     |                |      |      | 114.85 | 0           | 0             |                               | 12.40                        | 29.30           | 56.56           | 88.59             |                | 6.20   |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C14H16N6S4Zn   |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 6    |    | 461.94     |                |      |      | 115.18 | 0           | 0             |                               | 0.00                         | 4.10            | 60.49           | 85.42             |                | 15.40  |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C6H4O2S        |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 7    |   | 140.16     |                | 1.31 | 1.31 | 34.14  | 2           | 0             |                               | 8.00                         | 22.00           | 1.00            | 4.00              |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C8H10N6S3      |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 8    |  | 286.39     |                | 1.27 | 1.27 | 100.82 | 2           | 4             |                               | 48.00                        | 65.00           | 2.00            | 8.00              |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C9H11MgN5S3    |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 9    |  | 309.71     |                |      |      | 88.50  | 0           | 0             |                               | 15.00                        | 26.00           |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C14H16MnN6S4   |      |      |        |             |               | 2-acetylthiophene             |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 10   |  | 451.50     |                |      |      | 115.18 | 0           | 0             |                               | 40.00                        | 53.00           | 61.00           | 92.00             |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C7H7ClCuN4S    |      |      |        |             |               | 2-formylpyridine              |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 11   |  | 278.22     |                |      |      | 76.80  | 0           | 0             |                               | 0.00                         | 0.00            | 0.00            | 0.00              |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C11H10N4S      |      |      |        |             |               | 2-Quinolinecarboxaldehyd<br>e |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 12   |  | 230.29     |                | 2.50 | 2.50 | 63.30  | 2           | 2             |                               | 0.00                         | 0.00            | 0.00            | 0.00              |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
|      |                                                                                     |            | C22H18CuN8S2   |      |      |        |             |               | 2-Quinolinecarboxaldehyd<br>e |                              |                 |                 |                   |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |
| 13   |  | 522.11     |                |      |      | 140.96 | 0           | 0             |                               | 32.9                         | 60.7            | 55.7            | 88                |                |        |             |             |         |                         |                          |                    |                       |                         |              |                     |                                     |                |









C15H23N3OS

benzaldehyde

293.43

3.83

3.83

59.64

2

2

23.00

36.00

28.67

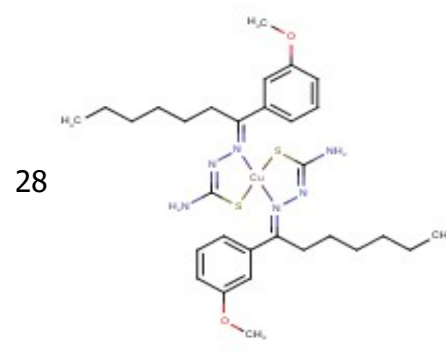
47.06

34.00

27.00

42.50

101.00



C30H44CuN6O2S2

benzaldehyde

648.39

133.64

0

0

8.20

15.30

82.51

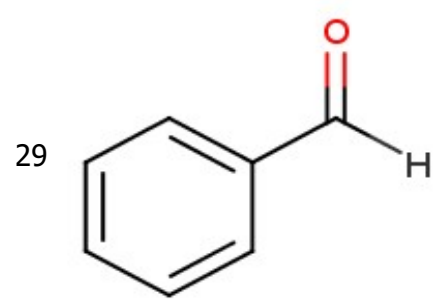
95.24

36.50

1.00

34.00

101.00



C7H6O

benzaldehyde

106.12

1.69

1.69

17.07

1

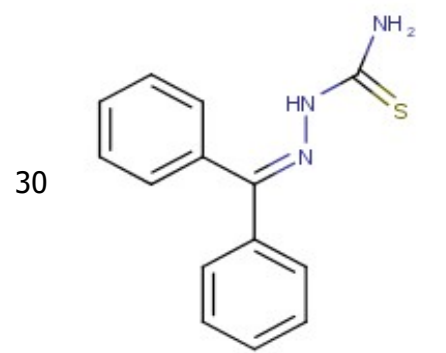
0

0.00

0.00

0.00

0.00



C14H13N3S

Benzophenone

255.34

3.41

3.41

50.41

1

2

39.00

53.00

25.00

41.00

101.00

101.00

101.00

73.00

yes

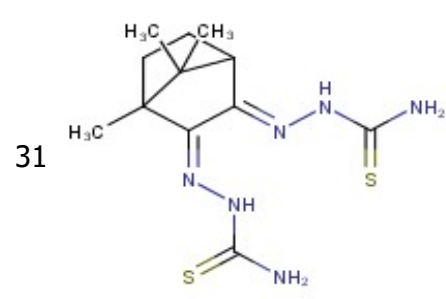
yes

Not mutagen

100.00

101.00

10.00



C12H20N6S2

camphorquinone

312.45

2.61

2.61

100.82

2

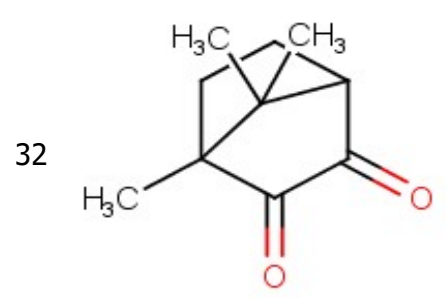
4

21.00

58.00

30.00

43.00



C10H14O2

camphorquinone

166.22

2.65

2.65

34.14

2

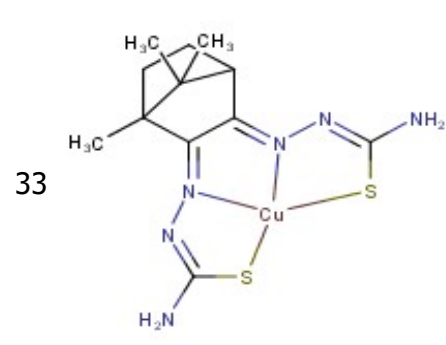
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2.00

10.00

17.00

18.00



C12H18CuN6S2

camphorquinone

373.98

115.18

0

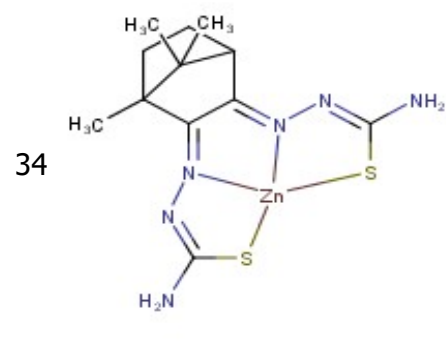
0

34.00

32.00

30.00

53.00



C12H18N6S2Zn

camphorquinone

375.82

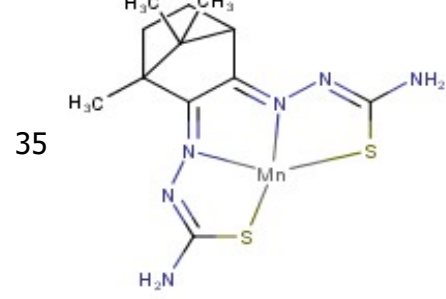
115.18

0

0

26.00

27.00



C12H18MnN6S2

camphorquinone

365.38

115.18

0

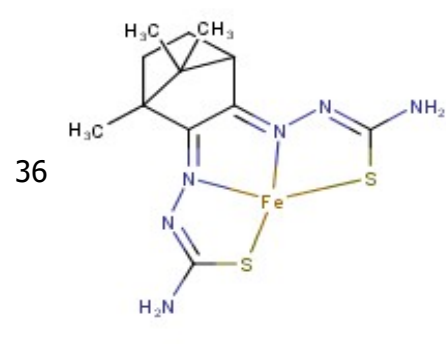
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8.00

10.00

23.00

34.00



C12H18FeN6S2

camphorquinone

366.28

115.18

0

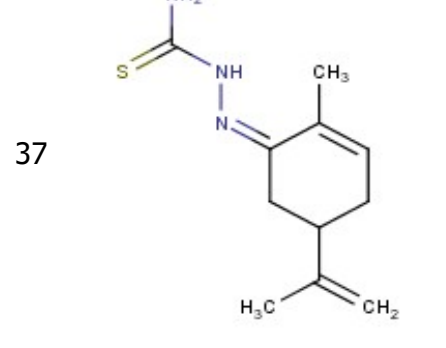
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39.00

40.00

27.00

34.00



C11H17N3S

carvone

223.34

2.53

2.53

50.41

1

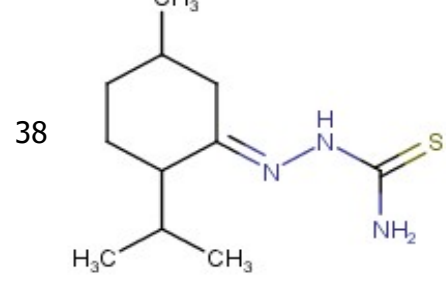
2

0.00

0.00

16.70

34.50



C11H21N3S

carvone

227.37

3.03

3.03

50.41

1

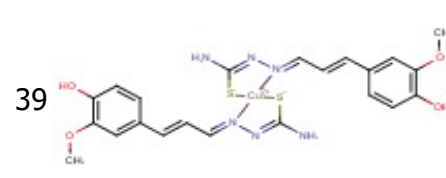
2

0

18.3

12.40

15.00



C22H24CuN6O4S2

cinnamaldehyde

564.14

174.10

0

0

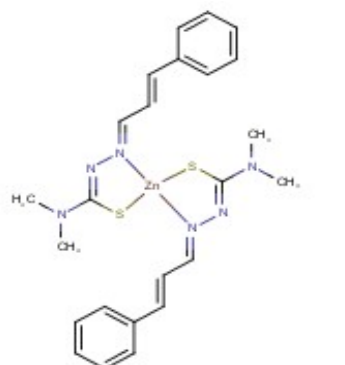
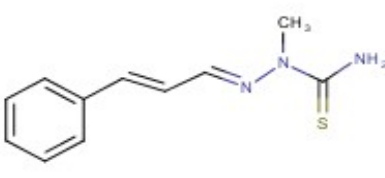
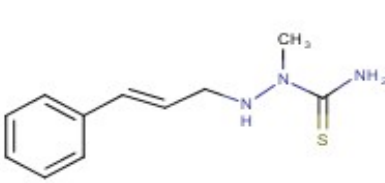
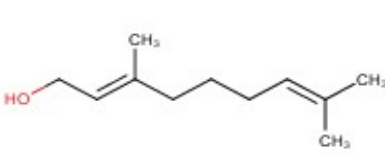
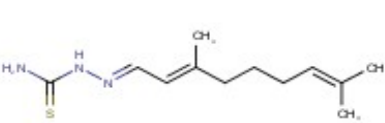
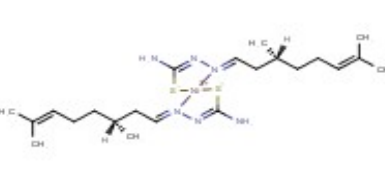
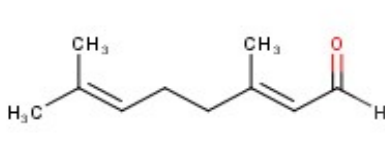
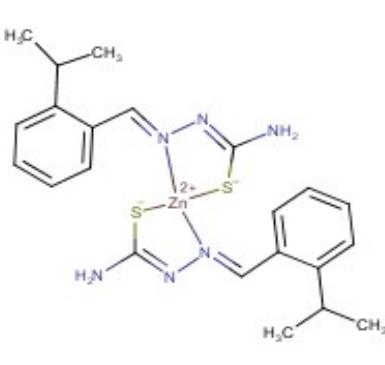
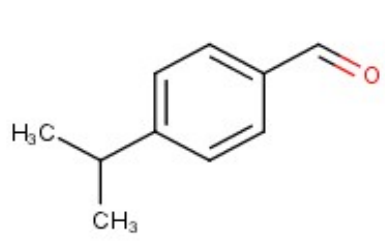
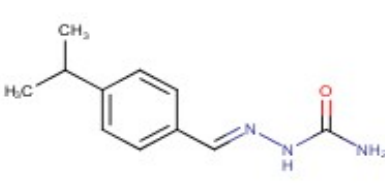
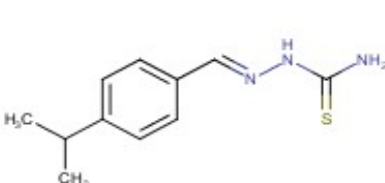
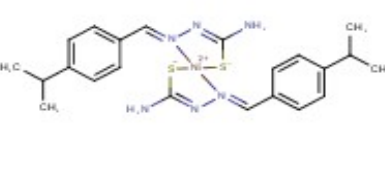
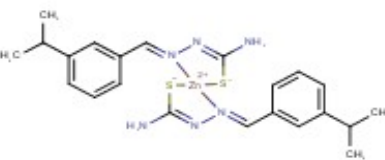
58

49

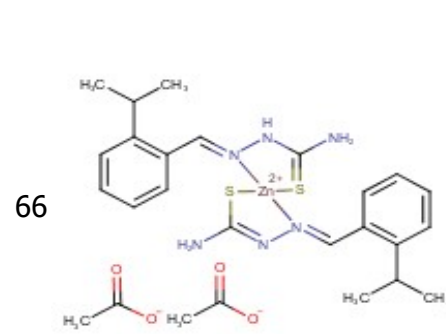






|    |                                                                                     |              |      |        |       |   |       |       |       |        |                |        |        |        |                          |        |        |        |       |
|----|-------------------------------------------------------------------------------------|--------------|------|--------|-------|---|-------|-------|-------|--------|----------------|--------|--------|--------|--------------------------|--------|--------|--------|-------|
|    |    | C24H28N6S2Zn |      |        |       |   |       |       |       |        | cinnamaldehyde |        |        |        |                          |        |        |        |       |
| 53 |                                                                                     | 530.03       |      | 69.62  | 0     | 0 |       | 17.00 | 40.00 | 75.00  | 100.00         | 101.00 | 41.00  | 39.50  | 101.00                   |        |        |        |       |
|    |                                                                                     | C11H13N3S    |      |        |       |   |       |       |       |        | cinnamaldehyde |        |        |        | no<br>yes<br>Not mutagen |        |        |        |       |
| 54 |    | 219.31       | 2.18 | 2.18   | 41.62 | 1 | 1     | -8.00 | 0.00  | 41.00  | 64.00          | 101.00 | 101.00 | 101.00 | 101.00                   | 100.00 | 50.00  | 10.00  |       |
|    |                                                                                     | C11H15N3S    |      |        |       |   |       |       |       |        | cinnamaldehyde |        |        |        | no<br>no<br>Not mutagen  |        |        |        |       |
| 55 |    | 221.32       | 2.01 | 2.01   | 41.29 | 1 | 2     | 2.00  | 15.00 | 37.00  | 45.00          | 101.00 | 101.00 | 101.00 | 101.00                   | 100.00 | 101.00 | 10.00  |       |
|    |                                                                                     | C11H20O      |      |        |       |   |       |       |       |        | citral         |        |        |        |                          |        |        |        |       |
| 56 |    | 168.28       | 2.95 | 2.95   | 20.23 | 1 | 1     | 3.00  | 26.00 | 0.00   | 4.00           |        |        |        |                          |        |        |        |       |
|    |                                                                                     | C12H21N3S    |      |        |       |   |       |       |       |        | citral         |        |        |        |                          |        |        |        |       |
| 57 |    | 239.38       | 3.09 | 3.09   | 50.41 | 1 | 2     | 24.00 | 57.00 | 0.00   | 20.00          |        |        |        |                          |        |        |        |       |
|    |                                                                                     | C22H40N6NiS2 |      |        |       |   |       |       |       |        | citronellal    |        |        |        | Not mutagen              |        |        |        |       |
| 58 |    | 511.42       |      | 115.18 | 0     | 0 | 41.52 | 58.90 | 29.01 | 82.10  |                |        |        |        |                          |        |        |        |       |
|    |                                                                                     | C10H16O      |      |        |       |   |       |       |       |        | citronellal    |        |        |        | 10                       |        |        |        |       |
| 59 |   | 152.24       | 2.66 | 2.66   | 17.07 | 1 | 0     | 2.00  | 5.00  | 24.00  | 41.00          |        |        |        |                          |        |        |        |       |
|    |                                                                                     | C22H28N6S2Zn |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        |                          |        |        |        |       |
| 60 |  | 506.01       |      | 115.18 | 0     | 0 | 8.40  | 11.20 | 55.30 | 100.00 | 30.00          | 36.00  | 33.00  | 32.00  |                          |        |        |        |       |
|    |                                                                                     | C10H12O      |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        |                          |        |        |        |       |
| 61 |  | 148.21       | 2.93 | 2.93   | 17.07 | 1 | 0     | 0.00  | 0.00  | 0.00   | 0.00           | 77.50  | 91.00  | 101.00 | 101.00                   |        |        |        |       |
|    |                                                                                     | C11H15N3O    |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        |                          |        |        |        |       |
| 62 |  | 205.26       | 2.02 | 2.02   | 67.48 | 2 | 2     | 0.00  | 0.00  | 0.00   | 0.00           | 101.00 | 96.00  | 101.00 | 101.00                   |        |        |        |       |
|    |                                                                                     | C11H15N3S    |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        | Not mutagen              |        |        |        |       |
| 63 |  | 221.32       | 2.91 | 2.91   | 50.41 | 1 | 2     | 80.00 | 90.00 | 100.00 | 100.00         | 101.00 | 101.00 | 85.00  | 53.00                    | 100.00 | 101.00 | 101.00 | 25.00 |
|    |                                                                                     | C22H28N6NiS2 |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        |                          |        |        |        |       |
| 64 |  | 499.32       |      | 115.18 | 0     | 0 | 84.00 | 90.00 | 91.50 | 96.00  |                |        |        |        |                          |        |        |        |       |
|    |                                                                                     | C22H28N6S2Zn |      |        |       |   |       |       |       |        | cuminaldehyde  |        |        |        |                          |        |        |        |       |
| 65 |  | 506.01       |      | 115.18 | 0     | 0 | 25.00 | 11.20 | 93.78 | 100.00 | 54.00          | 41.50  | 42.00  | 101.00 |                          |        |        |        |       |





C26H35N6O4S2Zn

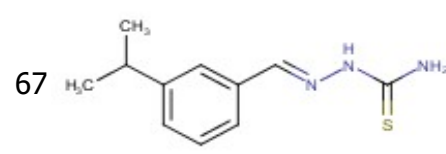
cuminaldehyde

66 625.10 114.85 0 0 69.30 81.90 30.00 36.00 33.00 32.00

C11H15N3S

cuminaldehyde

Not mutagen

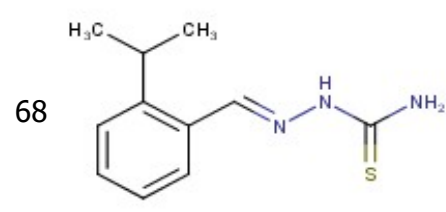


67 221.32 2.91 2.91 50.41 1 2 19.00 21.00 67.00 97.00 101.00 101.00 101.00 73.00

C11H15N3S

cuminaldehyde

Not mutagen

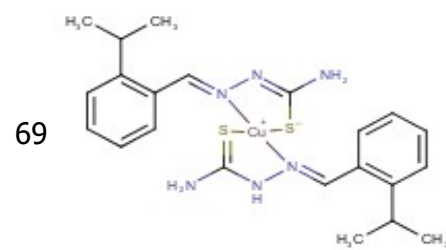


68 221.32 2.91 2.91 50.41 1 2 0.00 0.00 0.00 0.00 101.00 101.00 101.00 101.00

100.00 101.00 10.00 10.00

C22H29CuN6S2

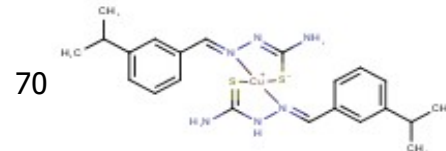
cuminaldehyde



69 505.18 114.85 0 0 0.00 0.00 46.00 73.51 16.00 18.00 32.00 24.00

C22H29CuN6S2

cuminaldehyde

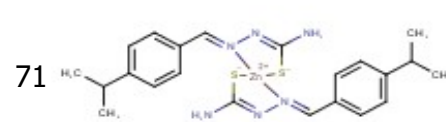


70 505.18 114.85 0 0 3.40 24.00 65.93 80.83 31.50 26.00 32.50 20.00

C22H28N6S2Zn

cuminaldehyde

Not mutagen

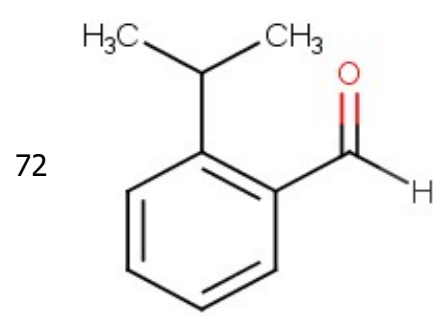


71 506.01 115.18 0 0 56.00 60.30 97.10 100.00 33.50 21.00 26.00 36.00

1.00 0.01 101.00 0.10

C10H12O

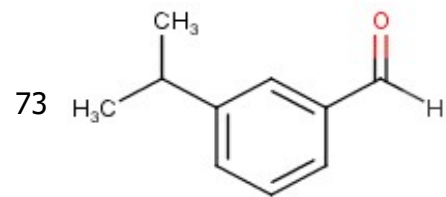
cuminaldehyde



72 148.21 2.93 2.93 17.07 1 0 0.0 0.0 0.0 13.9

C10H12O

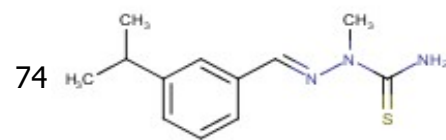
cuminaldehyde



73 148.21 2.93 2.93 17.07 1 0 0.0 0.0 0.0 0.0

C12H17N3S

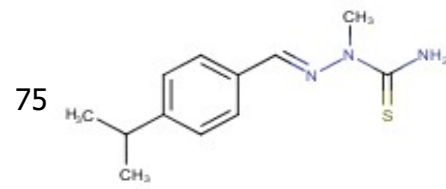
cuminaldehyde



74 235.35 3.13 3.13 41.62 1 1 47.7 70.6 19.46 62.74 101.00 97.00 101.00 66.00

C12H17N3S

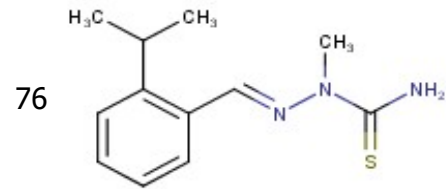
cuminaldehyde



75 235.35 3.13 3.13 41.62 1 1 29.2 32.5 7.40 41.80

C12H17N3S

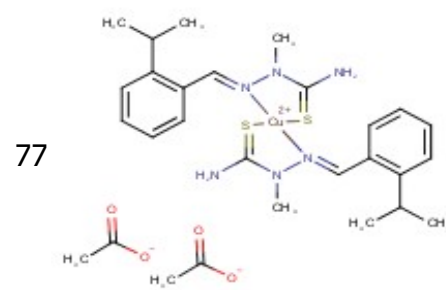
cuminaldehyde



76 235.35 3.13 3.13 41.62 1 1 19.1 22.1 38.44 37.69

C28H40CuN6O4S2

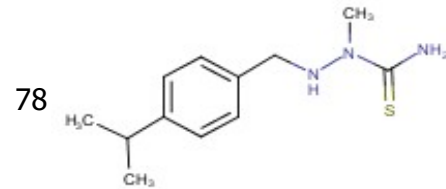
cuminaldehyde



77 652.33 96.94 0 0 90 95 71.40 86.70 9.50 31.00 17.50 20.00

C12H19N3S

cuminaldehyde



78 237.37 2.65 2.65 41.29 1 2 0.00 4.00 13.00 10.00









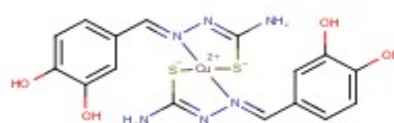
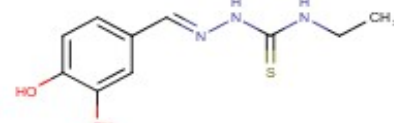
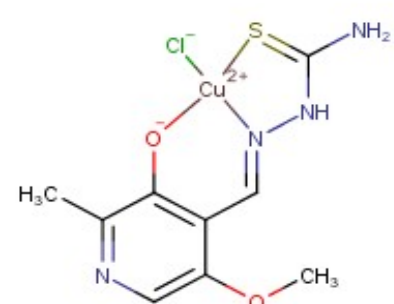
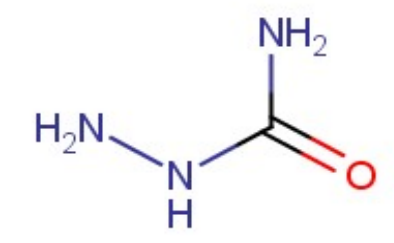
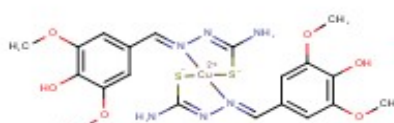
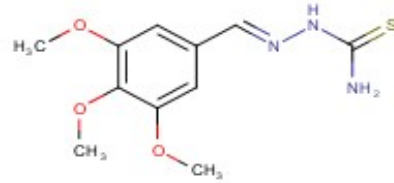
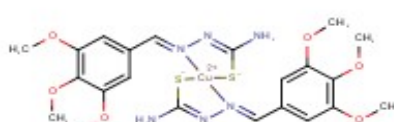
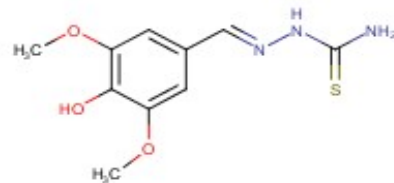
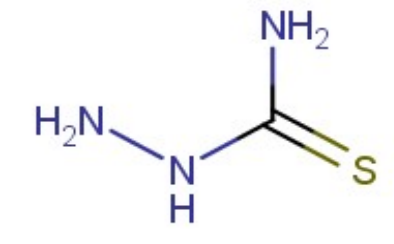
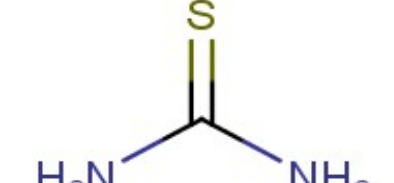
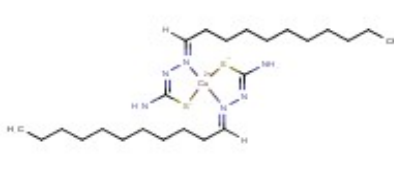
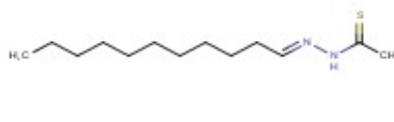


[illegible]



[illegible]

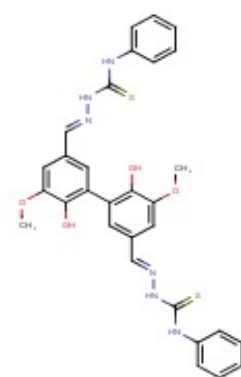
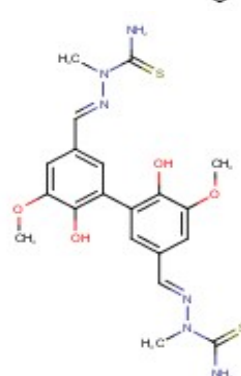
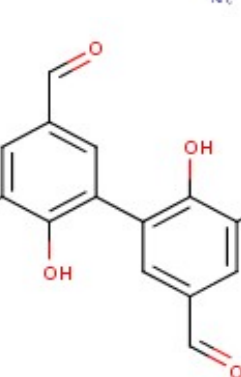
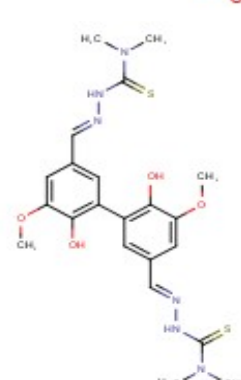


|     |                                                                                     |                |       |        |       |   |                      |       |       |       |       |
|-----|-------------------------------------------------------------------------------------|----------------|-------|--------|-------|---|----------------------|-------|-------|-------|-------|
|     |                                                                                     | C16H16CuN6O4S2 |       |        |       |   | protocatechualdehyde |       |       |       |       |
| 131 |    | 484.01         |       | 196.10 | 0     | 0 | 0.00                 | 0.00  | 0.00  | 6.00  |       |
|     |                                                                                     | C10H13N3O2S    |       |        |       |   | protocatechualdehyde |       |       |       |       |
| 132 |    | 239.29         | 1.64  | 1.63   | 76.88 | 3 | 4                    | 17.00 | 24.00 | 0.00  | 5.00  |
|     |                                                                                     | C9H11ClCuN4O2S |       |        |       |   | pyridoxal            |       |       |       |       |
| 133 |    | 338.27         |       | 88.61  | 0     | 0 | 0.00                 | 0.00  | 0.00  | 0.00  |       |
|     |                                                                                     | CH5N3O         |       |        |       |   | semicarbazide        |       |       |       |       |
| 134 |    | 75.07          | -1.66 | -1.66  | 81.14 | 2 | 3                    | 0.00  | 0.00  | 0.00  | 0.00  |
|     |                                                                                     | C20H24CuN6O6S2 |       |        |       |   | syringaldehyde       |       |       |       |       |
| 135 |    | 572.11         |       | 192.56 | 0     | 0 | 48.00                | 61.00 | 29.00 | 61.00 |       |
|     |                                                                                     | C11H15N3O3S    |       |        |       |   | syringaldehyde       |       |       |       |       |
| 136 |    | 269.32         | 1.19  | 1.19   | 78.10 | 4 | 2                    | 0.00  | 0.00  | 6.00  | 0.00  |
|     |                                                                                     | C22H28CuN6O6S2 |       |        |       |   | syringaldehyde       |       |       |       |       |
| 137 |   | 600.17         |       | 170.56 | 0     | 0 | 55.00                | 54.00 | 47.00 | 76.00 |       |
|     |                                                                                     | C10H13N3O3S    |       |        |       |   | syringaldehyde       |       |       |       |       |
| 138 |  | 255.29         | 1.05  | 1.04   | 89.10 | 4 | 3                    | 3.00  | 0.00  | 0.00  | 2.00  |
|     |                                                                                     | CH5N3S         |       |        |       |   | thiosemicarbazide    |       |       |       |       |
| 139 |  | 91.13          | -0.77 | -0.77  | 64.07 | 1 | 3                    | 0.00  | 0.00  | 0.00  | 0.00  |
|     |                                                                                     | CH4N2S         |       |        |       |   | thiourea             |       |       |       |       |
| 140 |  | 76.12          | -0.47 | -0.47  | 52.04 | 0 | 2                    | 0.00  | 0.00  | 0.00  | 0.00  |
|     |                                                                                     | C24H48CuN6S2   |       |        |       |   | undecanal            |       |       |       |       |
| 141 |  | 548.36         |       | 115.18 | 0     | 0 | 60.4                 | 94    | 84.80 | 96.00 |       |
|     |                                                                                     | C13H26N2S      |       |        |       |   | undecanal            |       |       |       |       |
| 142 |  | 242.43         | 4.19  | 4.19   | 24.39 | 1 | 1                    | 78.00 | 62.00 | 72.00 | 93.00 |
|     |                                                                                     | C11H22O        |       |        |       |   | undecanal            |       |       |       |       |
| 143 |  | 170.30         | 3.88  | 3.88   | 17.07 | 1 | 0                    | 0.00  | 14.00 | 7.00  | 19.00 |







|     |                                                                                   |              |      |      |        |   |          |  |      |      |
|-----|-----------------------------------------------------------------------------------|--------------|------|------|--------|---|----------|--|------|------|
|     |  | C30H28N6O4S2 |      |      |        |   | vanillin |  |      |      |
| 157 |                                                                                   | 600.71       | 6.56 | 6.55 | 131.76 | 6 | 6        |  | 4.0  | 11.0 |
|     |  | C20H24N6O4S2 |      |      |        |   | vanillin |  |      |      |
| 158 |                                                                                   | 476.57       | 2.53 | 2.51 | 142.16 | 6 | 4        |  | 17.0 | 17.0 |
|     |  | C16H14O6     |      |      |        |   | vanillin |  |      |      |
| 159 |  | 302.28       | 2.12 | 1.53 | 93.06  | 6 | 2        |  | 0.0  | 8.0  |
|     |  | C22H28N6O4S2 |      |      |        |   | vanillin |  |      |      |
| 160 |                                                                                   | 504.62       | 2.98 | 2.96 | 114.18 | 6 | 4        |  | 1.0  | 8.0  |



