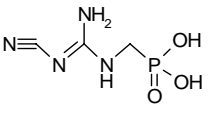
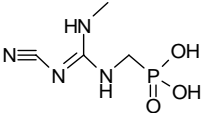
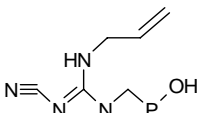
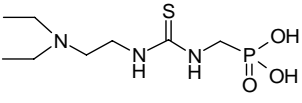
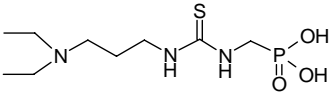
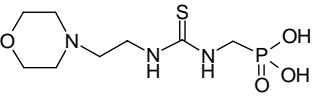
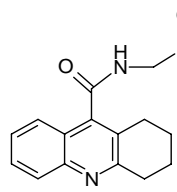
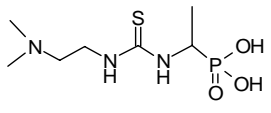
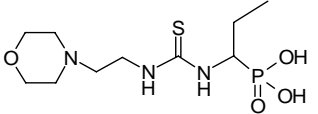
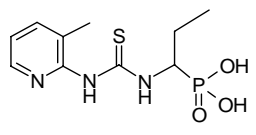
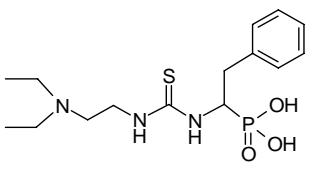
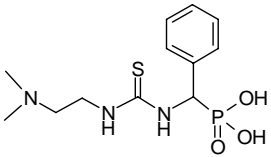
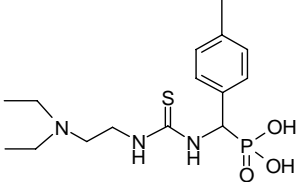
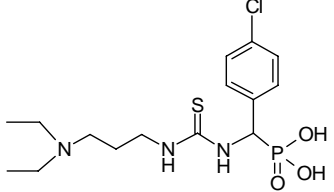
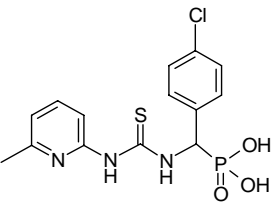
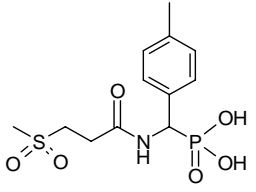
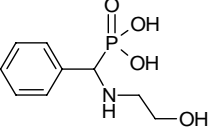
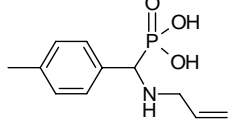
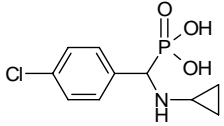
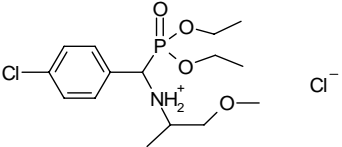
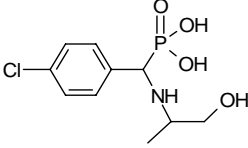
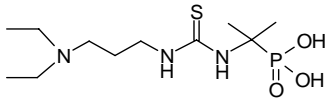
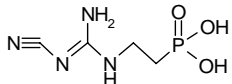
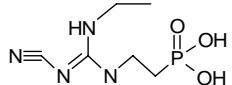
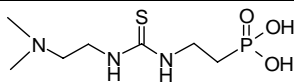
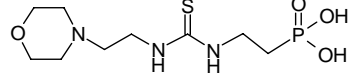
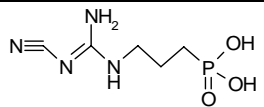
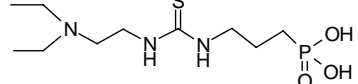
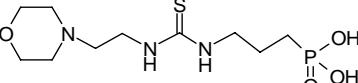
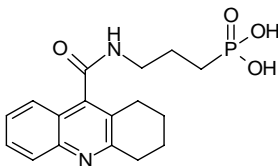
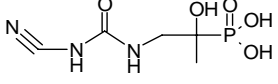
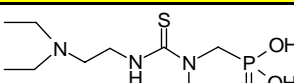
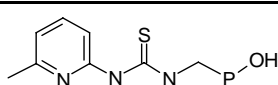
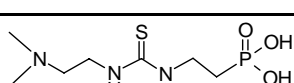
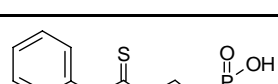
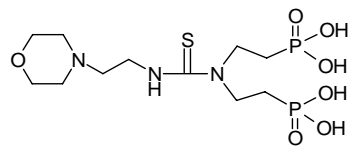
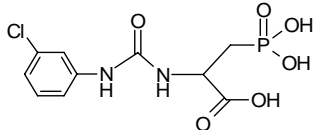
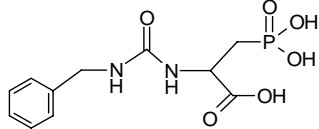
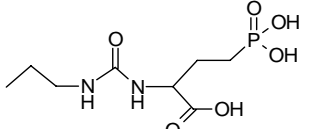
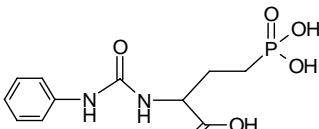
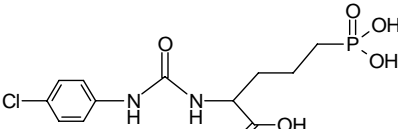
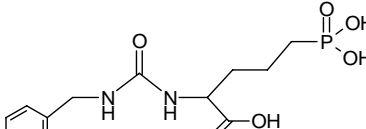
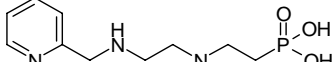
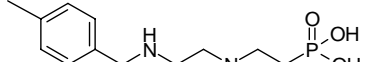
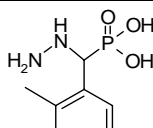
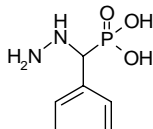


| ID Number    | Structure   | Formula  | M.W.   | m.p. °C | Remarks                |
|--------------|---|--|--------|---------|------------------------|
| A            | <b>AMINO-PHOSPHONIC ACIDS and N-derivatives</b>                                     |  |        |         |                        |
| A01-36A-5062 |    | C <sub>3</sub> H <sub>7</sub> N <sub>4</sub> O <sub>3</sub> P    | 178,09 | 309-310 | colorless crystals     |
| A01-36A-5063 |    | C <sub>4</sub> H <sub>9</sub> N <sub>4</sub> O <sub>3</sub> P    | 192,12 | 233-234 | colorless crystals     |
| A01-36A-5064 |    | C <sub>6</sub> H <sub>11</sub> N <sub>4</sub> O <sub>3</sub> P   | 218,15 | 196-198 | colorless crystals     |
| A01-70-4911  |    | C <sub>8</sub> H <sub>20</sub> N <sub>3</sub> O <sub>3</sub> PS  | 269,30 | 184-186 | colorless crystals     |
| A01-70-4912  |    | C <sub>9</sub> H <sub>22</sub> N <sub>3</sub> O <sub>3</sub> PS  | 283,33 | 197-200 | colorless crystals     |
| A01-70-4913  |   | C <sub>8</sub> H <sub>18</sub> N <sub>3</sub> O <sub>4</sub> PS  | 283,29 | 207-208 | colorless crystals     |
| A01-74-5047  |  | C <sub>15</sub> H <sub>17</sub> N <sub>2</sub> O <sub>4</sub> P  | 320,29 | 289-292 | cream-colored crystals |
| A02-70-4915  |  | C <sub>7</sub> H <sub>18</sub> N <sub>3</sub> O <sub>3</sub> PS  | 255,28 | 230-232 | colorless crystals     |
| A03-70-4916  |  | C <sub>10</sub> H <sub>22</sub> N <sub>3</sub> O <sub>4</sub> PS | 311,34 | 208-209 | colorless crystals     |
| A03-70-4917  |  | C <sub>10</sub> H <sub>16</sub> N <sub>3</sub> O <sub>3</sub> PS | 289,30 | 175-178 | colorless crystals     |
| A04-70-4919  |  | C <sub>15</sub> H <sub>26</sub> N <sub>3</sub> O <sub>3</sub> PS | 359,43 | 224-225 | colorless crystals     |
| A05-70-4920  |  | C <sub>12</sub> H <sub>20</sub> N <sub>3</sub> O <sub>3</sub> PS | 317,35 | 272-274 | colorless crystals     |

SELECTED RECENT COMPOUNDS.xls

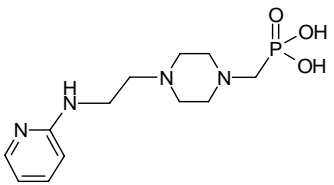
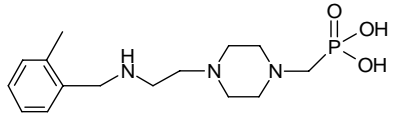
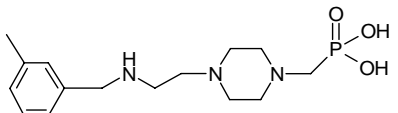
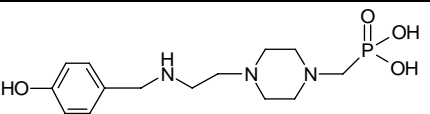
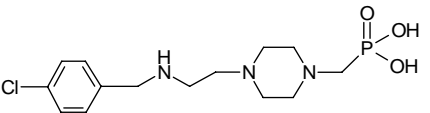
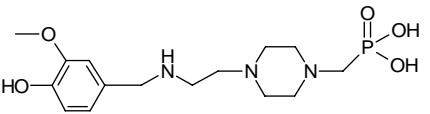
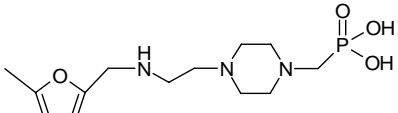
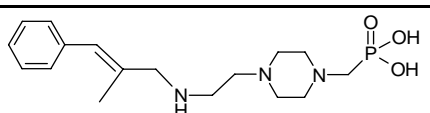
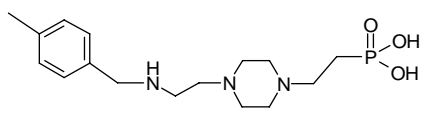
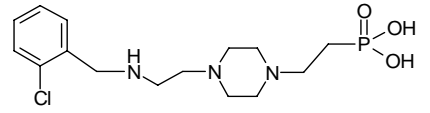
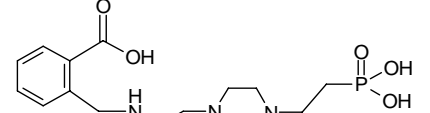
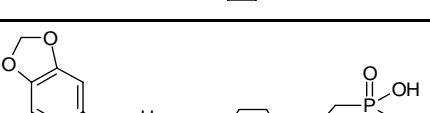
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|-------------|---|--|--------|---------|--------------------|
| A05-70-4921 |    | C <sub>15</sub> H <sub>26</sub> N <sub>3</sub> O <sub>3</sub> PS   | 359,43 | 255-258 | colorless crystals |
| A05-70-4922 |    | C <sub>15</sub> H <sub>25</sub> ClN <sub>3</sub> O <sub>3</sub> PS | 393,88 | 215-216 | colorless crystals |
| A05-70-4923 |    | C <sub>14</sub> H <sub>15</sub> ClN <sub>3</sub> O <sub>3</sub> PS | 371,78 | 254-256 | colorless crystals |
| A05-70-4946 |   | C <sub>12</sub> H <sub>18</sub> NO <sub>6</sub> PS                 | 335,32 | 166-168 | colorless crystals |
| A05-74-5048 |  | C <sub>9</sub> H <sub>14</sub> NO <sub>4</sub> P                   | 231,19 | 303-305 | colorless crystals |
| A05-74-5049 |  | C <sub>11</sub> H <sub>16</sub> NO <sub>3</sub> P                  | 241,23 | 188-190 | colorless crystals |
| A05-74-5051 |  | C <sub>10</sub> H <sub>13</sub> ClNO <sub>3</sub> P                | 261,65 | 185-187 | colorless crystals |
| A05-74-5052 |  | C <sub>15</sub> H <sub>26</sub> Cl <sub>2</sub> NO <sub>4</sub> P  | 386,26 | 120-122 | colorless crystals |
| A05-74-5053 |  | C <sub>10</sub> H <sub>15</sub> ClNO <sub>4</sub> P                | 279,66 | 190-192 | colorless crystals |
| A06-70-4918 |  | C <sub>11</sub> H <sub>26</sub> N <sub>3</sub> O <sub>3</sub> PS   | 311,39 | 284-286 | colorless crystals |

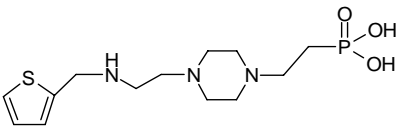
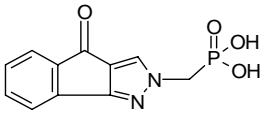
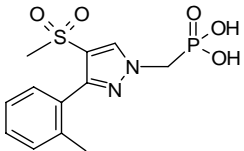
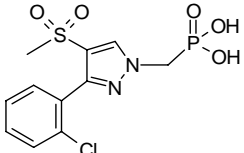
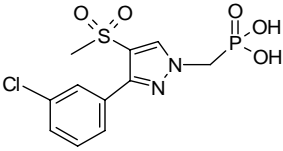
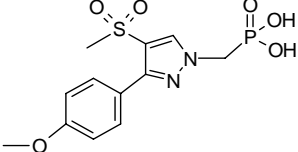
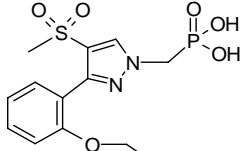
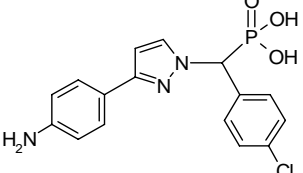
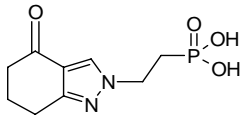
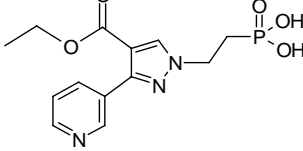
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|--------------|---|---------------|--------|---------|--------------------|
| A07-36A-5065 |    | C4H9N4O3P     | 192,12 | 194-196 | colorless crystals |
| A07-36A-5066 |    | C6H13N4O3P    | 220,17 | 143-146 | colorless crystals |
| A07-70-4924  |    | C7H18N3O3PS   | 255,28 | 202-203 | colorless crystals |
| A07-70-4925  |    | C9H20N3O4PS   | 297,32 | 230-231 | colorless crystals |
| A09-36A-5067 |    | C5H11N4O3P    | 206,14 | 201-203 | colorless crystals |
| A09-70-4926  |    | C10H24N3O3PS  | 297,36 | 219-220 | colorless crystals |
| A09-70-4927  |    | C10H22N3O4PS  | 311,34 | 231-232 | colorless crystals |
| A09-74-5054  |  | C17H21N2O4P   | 348,34 | 245-247 | colorless crystals |
| A13-36A-5055 |  | C5H10N3O5P    | 223,13 | 324-327 | colorless crystals |
| <b>B</b>     | <b>N-ALKYL-AMINO-PHOSPHONIC ACIDS and N-derivatives</b>                             |               |        |         |                    |
| B01-70-4929  |  | C9H22N3O3PS   | 283,33 | 187-189 | colorless crystals |
| B01-70-4930  |  | C9H14N3O3PS   | 275,27 | 128-130 | colorless crystals |
| B03-70-4931  |  | C8H20N3O3PS   | 269,30 | 212-214 | colorless crystals |
| B03-70-4932  |  | C9H14N3O3PS   | 275,27 | 173-175 | colorless crystals |
| <b>C</b>     | <b>AMINO- and IMINO-DIPHOSPHONIC ACIDS and N-derivatives</b>                        |               |        |         |                    |
| C02-70-4935  |  | C11H25N3O7P2S | 405,35 | 224-226 | colorless crystals |

| D   |   |               |        |         |                    |  |
|---|---|---------------|--------|---------|--------------------|--|
| AMINO- and IMINO-CARBOXY-PHOSPHONIC ACIDS and N-derivatives         |   |               |        |         |                    |  |
| D02-51-4872   |    | C10H12ClN2O6P | 322,64 | 210-212 | colorless crystals |  |
| D02-51-4873   |    | C11H15N2O6P   | 302,23 | 198-200 | colorless crystals |  |
| D03-51-4874   |    | C8H17N2O6P    | 268,21 | 141-143 | colorless crystals |  |
| D03-51-4875   |    | C11H15N2O6P   | 302,23 | 38-40   | colorless crystals |  |
| D04-51-4878   |   | C12H16ClN2O6P | 350,70 | 200-201 | colorless crystals |  |
| D04-51-4879   |  | C13H19N2O6P   | 330,28 | 170-172 | colorless crystals |  |
| F   |   |               |        |         |                    |  |
| DIAMINO-PHOSPHONIC and DIAMINO-DIPHOSPHONIC ACIDS and N-derivatives |   |               |        |         |                    |  |
| F01-73-4943   |  | C10H18N3O3P   | 259,25 | 168-170 | colorless crystals |  |
| F01-73-5046   |  | C12H21N2O3P   | 272,29 | 250-255 | colorless crystals |  |
| G   |   |               |        |         |                    |  |
| HYDRAZINO-PHOSPHONIC ACIDS and carbonyl derivatives                 |   |               |        |         |                    |  |
| G01-00-B7491  |  | C8H13N2O3P    | 216,18 | 190-192 | colorless crystals |  |
| G01-00-B7492  |  | C8H13N2O3P    | 216,18 | 194-196 | colorless crystals |  |

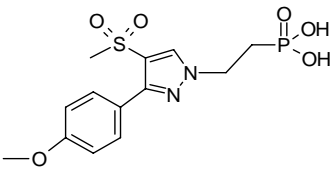
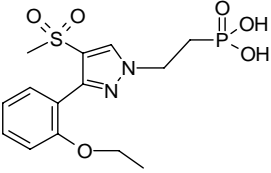
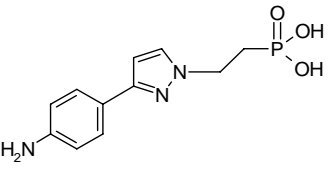
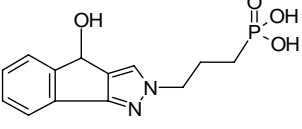
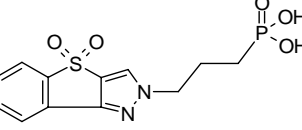
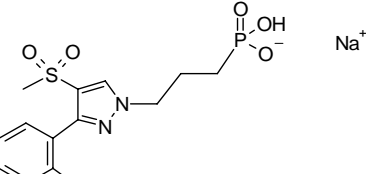
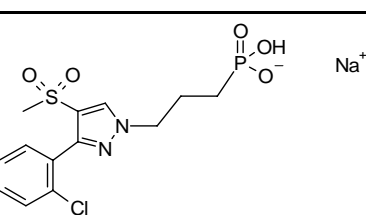
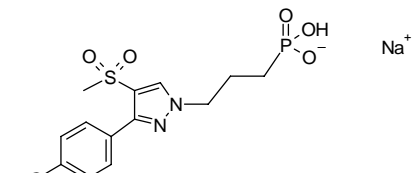
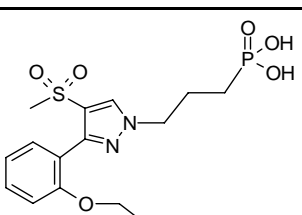
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|--------------|--|--------------|--------|---------|-----------------------------------|
| G01-00-B7493 |  | C8H13N2O3P   | 216,18 | 184-187 | colorless crystals                |
| G01-00-B7494 |  | C7H10ClN2O3P | 236,60 | 200-202 | colorless crystals                |
| G08-00-B7421 |  | C3H9N2O5P    | 184,09 | 245-246 | colorless crystals                |
| G09-00-B7444 |  | C2H10N2O6P2  | 220,06 | 264-271 | colorless crystals<br>hygroscopic |
| H            | <b>PIPERAZINE-ALKYL-PHOSPHONIC ACIDS and 4-N-derivatives</b> |              |        |         |                                   |
| H01-26-4865  |  | C11H19N2O6PS | 338,32 | 151-153 | colorless crystals                |
| H01-26-5056  |  | C19H24N3O4P  | 389,39 | 261-263 | colorless crystals                |
| H01-70-4933  |  | C12H27N4O3PS | 338,41 | 178-180 | colorless crystals                |
| H01-70-4934  |  | C12H19N4O3PS | 330,35 | 257-260 | colorless crystals                |
| H02-26-5057  |  | C20H26N3O4P  | 403,42 | 240-242 | colorless crystals                |
| H02-36A-5068 |  | C8H16N5O3P   | 261,22 | 274-276 | colorless crystals                |
| H02-36A-5069 |  | C10H20N5O3P  | 289,28 | 161-164 | colorless crystals                |

SELECTED RECENT COMPOUNDS.xls

|             |   |               |        |         |                    |
|-------------|---|---------------|--------|---------|--------------------|
| H04-63-4907 |    | C12H21N4O3P   | 300,30 | 109-111 | colorless crystals |
| H04-63-5010 |    | C15H26N3O3P   | 327,37 | 145-148 | colorless crystals |
| H04-63-5011 |    | C15H26N3O3P   | 327,37 | 118-120 | colorless crystals |
| H04-63-5012 |    | C14H24N3O4P   | 329,34 | 183-186 | colorless crystals |
| H04-63-5013 |    | C14H23ClN3O3P | 347,78 | 240-245 | colorless crystals |
| H04-63-5014 |   | C15H26N3O5P   | 359,37 | 216-218 | colorless crystals |
| H04-63-5015 |  | C13H24N3O4P   | 317,33 | 127-129 | colorless crystals |
| H04-63-5016 |  | C17H28N3O3P   | 353,40 | 128-131 | colorless crystals |
| H05-63-5017 |  | C16H28N3O3P   | 341,39 | 121-123 | colorless crystals |
| H05-63-5018 |  | C15H25ClN3O3P | 361,81 | 189-191 | colorless crystals |
| H05-63-5019 |  | C16H26N3O5P   | 371,38 | 247-250 | colorless crystals |
| H05-63-5020 |  | C16H26N3O5P   | 371,38 | 250-253 | colorless crystals |

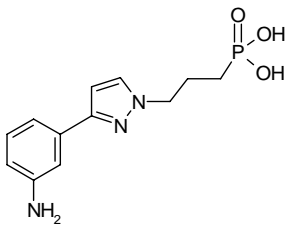
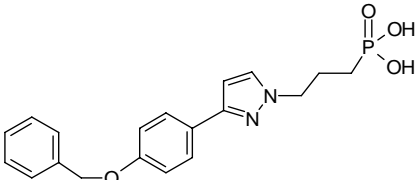
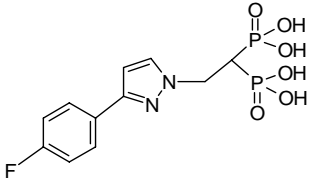
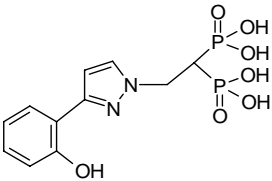
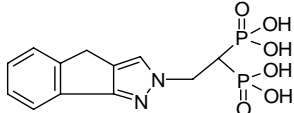
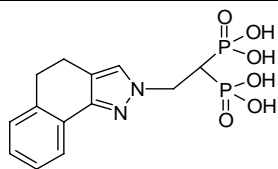
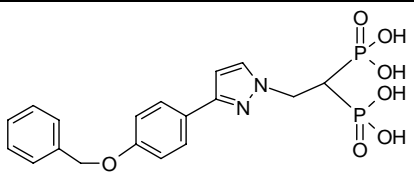
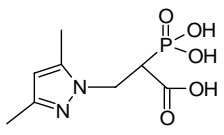
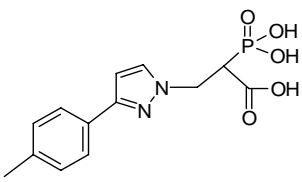
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|--|---|----------------|--------|---------|------------------------|
| H05-63-5021                              |    | C13H24N3O3PS   | 333,39 | 250-254 | colorless crystals     |
| <b>L PYRAZOLE-ALKYL-PHOSPHONIC ACIDS</b> |   |                |        |         |                        |
| L01-58-4883                              |    | C11H9N2O4P     | 264,18 | 269-272 | orange crystals        |
| L01-58-4951                              |    | C12H15N2O5PS   | 330,30 | 263-267 | colorless crystals     |
| L01-58-4952                              |    | C11H12ClN2O5PS | 350,72 | 260-263 | colorless crystals     |
| L01-58-4953                              |   | C11H12ClN2O5PS | 350,72 | 204-208 | colorless crystals     |
| L01-58-4954                              |  | C12H15N2O6PS   | 346,30 | 254-257 | colorless crystals     |
| L01-58-4955                              |  | C13H17N2O6PS   | 360,33 | 235-237 | colorless crystals     |
| L02-58-5058                              |  | C16H15ClN3O3P  | 363,74 | 180-185 | cream-colored crystals |
| L03-58-4886                              |  | C9H13N2O4P     | 244,19 | 230-232 | colorless crystals     |
| L03-58-4888                              |  | C13H16N3O5P    | 325,26 | 175-178 | cream-colored crystals |

SELECTED RECENT COMPOUNDS.xls

|             |   |                  |        |         |                                |
|-------------|---|------------------|--------|---------|--------------------------------|
| L03-58-4960 |    | C13H17N2O6PS     | 360,33 | 185-187 | colorless crystals             |
| L03-58-4961 |    | C14H19N2O6PS     | 374,36 | 223-225 | colorless crystals             |
| L03-58-5059 |    | C11H14N3O3P      | 267,23 | 267-272 | cream-colored crystals         |
| L04-58-4890 |    | C13H15N2O4P      | 294,25 | 186-188 | colorless crystals             |
| L04-58-4962 |   | C12H13N2O5PS     | 328,29 | 244-246 | colorless crystals             |
| L04-58-4963 |  | C14H18N2NaO5PS   | 380,34 | 237-242 | colorless solid hygroscopic    |
| L04-58-4964 |  | C13H15ClN2NaO5PS | 400,76 | 240-245 | colorless solid hygroscopic    |
| L04-58-4965 |  | C14H18N2NaO6PS   | 396,34 | 252-257 | colorless crystals hygroscopic |
| L04-58-4966 |  | C15H21N2O6PS     | 388,38 | 181-183 | colorless crystals             |



SELECTED RECENT COMPOUNDS.xls

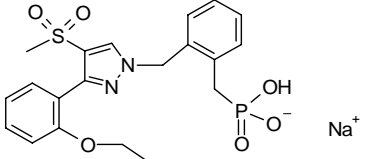
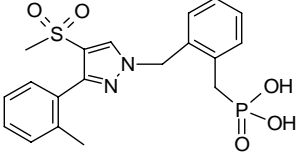
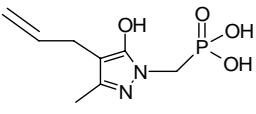
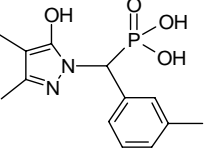
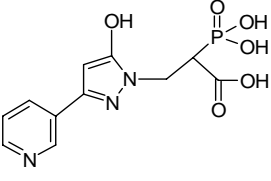
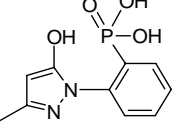
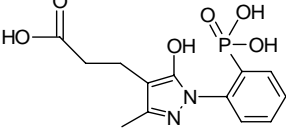
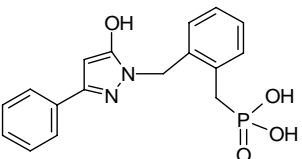
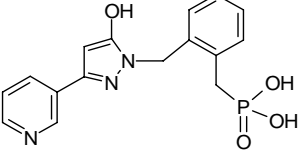
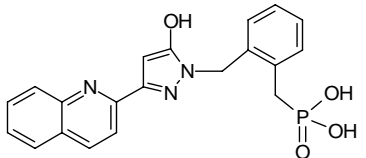
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|--------------|---|---|--------|---------|--------------------|
| L04-58-5060  |    | C <sub>12</sub> H <sub>16</sub> N <sub>3</sub> O <sub>3</sub> P               | 281,25 | 202-204 | colorless crystals |
| L04-58-5070  |    | C <sub>19</sub> H <sub>21</sub> N <sub>2</sub> O <sub>4</sub> P               | 372,36 | 137-139 | colorless crystals |
| L05-58-4891  |    | C <sub>11</sub> H <sub>13</sub> FN <sub>2</sub> O <sub>6</sub> P <sub>2</sub> | 350,18 | 178-180 | colorless crystals |
| L05-58-4892  |   | C <sub>11</sub> H <sub>14</sub> N <sub>2</sub> O <sub>7</sub> P <sub>2</sub>  | 348,19 | 212-215 | colorless crystals |
| L05-58-4893  |  | C <sub>12</sub> H <sub>14</sub> N <sub>2</sub> O <sub>6</sub> P <sub>2</sub>  | 344,20 | 194-197 | yellowish crystals |
| L05-58-4894  |  | C <sub>13</sub> H <sub>16</sub> N <sub>2</sub> O <sub>6</sub> P <sub>2</sub>  | 358,23 | 273-276 | colorless crystals |
| L05-58-5071  |  | C <sub>18</sub> H <sub>20</sub> N <sub>2</sub> O <sub>7</sub> P <sub>2</sub>  | 438,32 | 241-243 | colorless crystals |
| L05A-58-5072 |  | C <sub>8</sub> H <sub>13</sub> N <sub>2</sub> O <sub>5</sub> P                | 248,18 | 164-166 | colorless crystals |
| L05A-58-5073 |  | C <sub>13</sub> H <sub>15</sub> N <sub>2</sub> O <sub>5</sub> P               | 310,25 | 245-248 | colorless crystals |

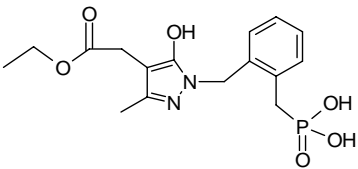
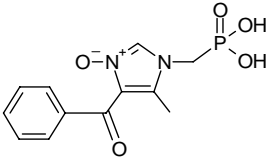
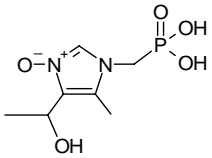
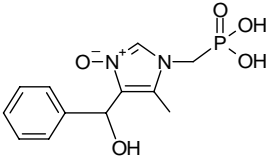
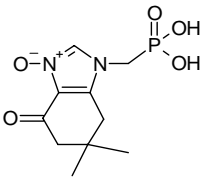
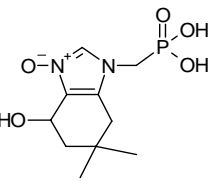
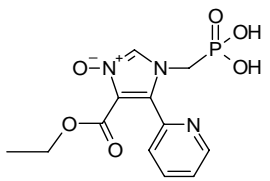
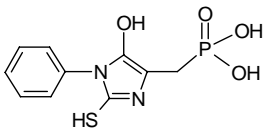
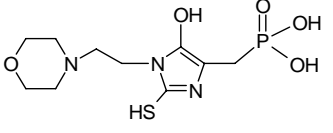
SELECTED RECENT COMPOUNDS.xls

|             |  |   |        |         |  |
|-------------|--|---|--------|---------|--|
| L06-58-4967 |  | C <sub>16</sub> H <sub>15</sub> N <sub>2</sub> O <sub>3</sub> P   | 314,28 | 148-152 | 2 isomers<br>cream-colored<br>crystals |
| L06-58-4968 |  | C <sub>15</sub> H <sub>12</sub> ClN <sub>2</sub> O <sub>3</sub> P | 334,70 | 133-137 | cream-colored<br>crystals              |
| L06-58-4969 |  | C <sub>13</sub> H <sub>11</sub> N <sub>2</sub> O <sub>3</sub> PS  | 306,28 | 132-137 | cream-colored<br>crystals              |
| L06-58-4970 |  | C <sub>14</sub> H <sub>12</sub> N <sub>3</sub> O <sub>3</sub> P   | 301,24 | 220-225 | yellowish<br>crystals                  |
| L06-58-4971 |  | C <sub>13</sub> H <sub>13</sub> N <sub>2</sub> O <sub>4</sub> P   | 292,23 | 258-262 | colorless<br>crystals                  |
| L06-58-4972 |  | C <sub>13</sub> H <sub>15</sub> N <sub>2</sub> O <sub>5</sub> P   | 310,25 | 225-230 | yellowish<br>crystals                  |
| L06-58-4973 |  | C <sub>17</sub> H <sub>17</sub> N <sub>2</sub> O <sub>5</sub> PS  | 392,37 | 215-220 | cream-colored<br>crystals              |
| L06-58-4975 |  | C <sub>17</sub> H <sub>17</sub> N <sub>2</sub> O <sub>6</sub> PS  | 408,37 | 265-270 | colorless<br>crystals                  |
| L08-58-4977 |  | C <sub>18</sub> H <sub>19</sub> N <sub>2</sub> O <sub>6</sub> PS  | 422,40 | 182-185 | cream-colored<br>crystals              |

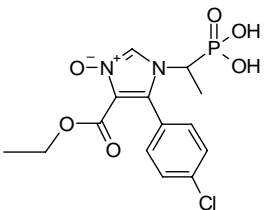
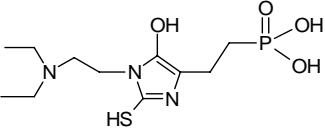
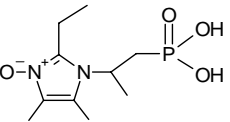
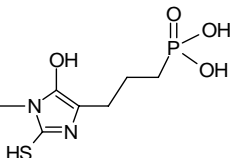
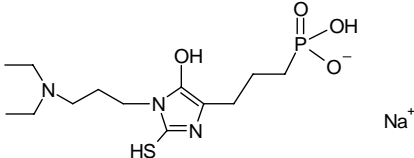
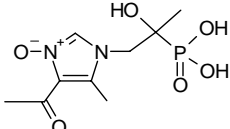
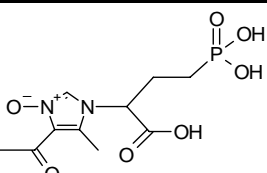
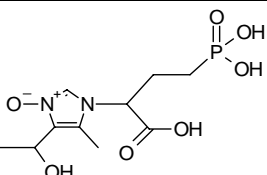
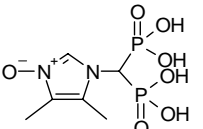
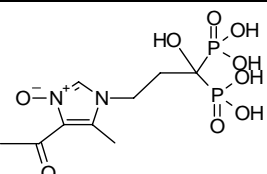
SELECTED RECENT COMPOUNDS.xls

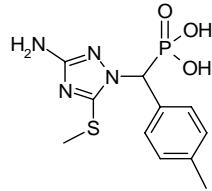
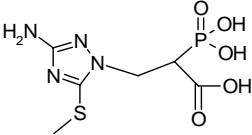
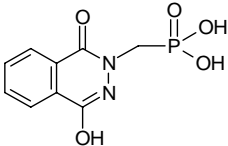
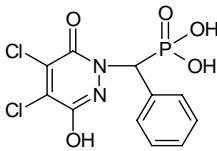
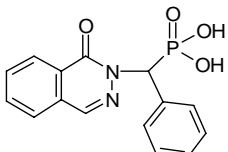
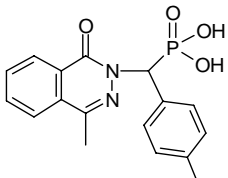
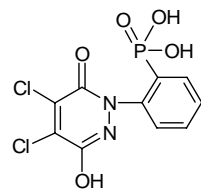
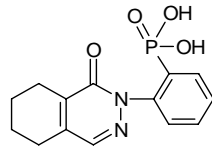
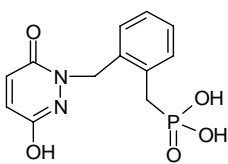
|             |  |  |        |         |                                    |
|-------------|--|--|--------|---------|------------------------------------|
| L09-58-4978 |  | C <sub>18</sub> H <sub>19</sub> N <sub>2</sub> O <sub>3</sub> P      | 342,34 | 95-97   | 2 isomers<br>colorless<br>crystals |
| L09-58-4979 |  | C <sub>17</sub> H <sub>16</sub> FN <sub>2</sub> O <sub>3</sub> P     | 346,30 | 193-197 | 2 isomers<br>colorless<br>crystals |
| L09-58-4980 |  | C <sub>17</sub> H <sub>17</sub> N <sub>2</sub> O <sub>4</sub> P      | 344,31 | 110-114 | colorless<br>crystals              |
| L09-58-4981 |  | C <sub>16</sub> H <sub>16</sub> N <sub>3</sub> O <sub>3</sub> P      | 329,30 | 224-226 | 2 isomers<br>colorless<br>crystals |
| L09-58-4982 |  | C <sub>14</sub> H <sub>17</sub> N <sub>2</sub> O <sub>4</sub> P      | 308,28 | 225-230 | colorless<br>crystals              |
| L09-58-4983 |  | C <sub>13</sub> H <sub>17</sub> N <sub>2</sub> O <sub>3</sub> P      | 280,27 | 269-274 | colorless<br>crystals              |
| L09-58-4984 |  | C <sub>17</sub> H <sub>15</sub> N <sub>2</sub> O <sub>5</sub> PS     | 390,36 | 250-252 | yellowish<br>crystals              |
| L09-58-4985 |  | C <sub>18</sub> H <sub>18</sub> N <sub>2</sub> NaO <sub>5</sub> PS   | 428,38 | 277-280 | colorless<br>crystals              |
| L09-58-4986 |  | C <sub>18</sub> H <sub>17</sub> ClN <sub>2</sub> NaO <sub>5</sub> PS | 462,83 | 222-227 | colorless solid                    |

|              |   |                |        |         |                                |
|--------------|---|----------------|--------|---------|--------------------------------|
| L09-58-4987  |    | C20H22N2NaO6PS | 472,44 | 287-290 | colorless solid<br>hygroscopic |
| L09-58-5074  |    | C19H21N2O5PS   | 420,43 | 93-95   | colorless<br>crystals          |
| M            | <b>HYDROXYPYRAZOLE-ALKYL-PHOSPHONIC ACIDS</b>                                       |                |        |         |                                |
| M01-59-4895  |    | C8H13N2O4P     | 232,18 | 235-237 | colorless<br>crystals          |
| M02-59-5075  |    | C13H17N2O4P    | 296,27 | 166-168 | colorless<br>crystals          |
| M05A-59-5076 |   | C11H12N3O6P    | 313,21 | 253-254 | yellowish<br>crystals          |
| M06-59-4989  |  | C10H11N2O4P    | 254,18 | 206-210 | colorless<br>crystals          |
| M06-59-4990  |  | C13H15N2O6P    | 326,25 | 162-165 | colorless<br>crystals          |
| M09-59-4991  |  | C17H17N2O4P    | 344,31 | 265-267 | cream-colored<br>crystals      |
| M09-59-4992  |  | C16H16N3O4P    | 345,30 | 177-180 | cream-colored<br>crystals      |
| M09-59-4993  |  | C20H18N3O4P    | 395,36 | 195-199 | orange-brown<br>crystals       |

|   |   |              |        |         |                    |
|---|---|--------------|--------|---------|--------------------|
| M09-59-4994   |    | C16H21N2O6P  | 368,33 | 256-260 | colorless crystals |
| <b>N</b> <b>IMIDAZOLE-ALKYL-PHOSPHONIC ACIDS and N-oxides</b> |   |              |        |         |                    |
| N01-11-4851   |    | C12H13N2O5P  | 296,22 | 225-230 | colorless crystals |
| N01-11-4852   |    | C7H13N2O5P   | 236,17 | 210-212 | colorless crystals |
| N01-11-4853   |    | C12H15N2O5P  | 298,24 | 223-226 | colorless crystals |
| N01-11-4854   |   | C10H15N2O5P  | 274,22 | 237-238 | colorless plates   |
| N01-11-4855   |  | C10H17N2O5P  | 276,23 | 230-240 | white solid        |
| N01-11-4856   |  | C12H14N3O6P  | 327,24 | 193-194 | colorless crystals |
| N01-72-4938   |  | C10H11N2O4PS | 286,25 | 132-135 | colorless crystals |
| N01-72-4939   |  | C10H18N3O5PS | 323,31 | 176-178 | colorless crystals |

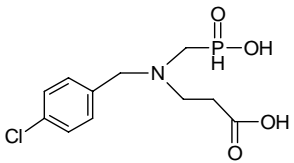
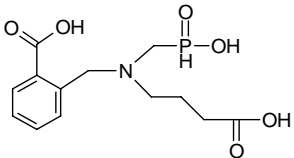
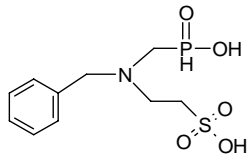
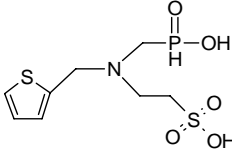
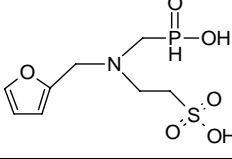
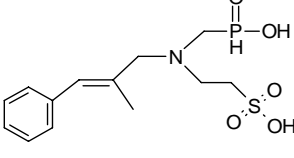
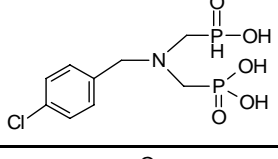
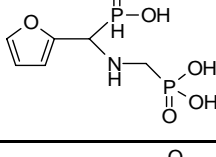
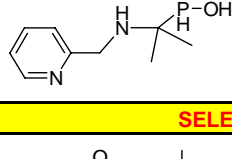
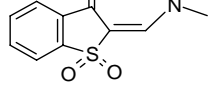
SELECTED RECENT COMPOUNDS.xls

|             |   |                |        |         |                             |
|-------------|---|----------------|--------|---------|-----------------------------|
| N02-11-4857 |    | C14H16ClN2O6P  | 374,72 | 166-169 | colorless crystals          |
| N05-72-4940 |    | C11H22N3O4PS   | 323,35 | 251-254 | colorless crystals          |
| N06-11-4859 |    | C10H19N2O4P    | 262,25 | 249-251 | colorless crystals          |
| N07-72-4941 |    | C7H13N2O4PS    | 252,23 | 143-145 | colorless crystals          |
| N07-72-4942 |   | C13H25N3NaO4PS | 373,39 | 162-165 | colorless crystals          |
| N08-11-4858 |  | C9H15N2O6P     | 278,20 | 220-222 | colorless crystals          |
| N11-51-4876 |  | C10H15N2O7P    | 306,21 | 211-213 | colorless crystals          |
| N11-51-4877 |  | C10H17N2O7P    | 308,23 | 55-57   | colorless solid hygroscopic |
| N12-48-4870 |  | C6H12N2O7P2    | 286,12 | 251-253 | colorless crystals          |
| N13-48-4871 |  | C9H16N2O9P2    | 358,18 | 226-227 | colorless crystals          |

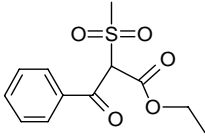
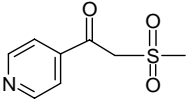
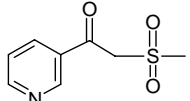
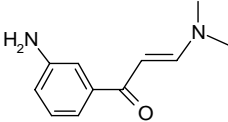
| P            | TRIAZOLE-ALKYL-PHOSPHONIC ACIDS   |               |        |         |                        |
|--------------|---|---------------|--------|---------|------------------------|
| P01A-61-5061 |    | C11H15N4O3PS  | 314,31 | 300-301 | colorless crystals     |
| P03-61-5077  |    | C6H11N4O5PS   | 282,22 | 244-247 | colorless crystals     |
| S            | PYRIDAZINE-ALKYL-PHOSPHONIC ACIDS   |               |        |         |                        |
| S01-62-4995  |    | C9H9N2O5P     | 256,16 | 195-200 | colorless crystals     |
| S02-62-4996  |    | C11H9Cl2N2O5P | 351,08 | 158-162 | colorless crystals     |
| S02-62-5080  |   | C15H13N2O4P   | 316,26 | 206-208 | colorless crystals     |
| S02-62-5081  |  | C17H17N2O4P   | 344,31 | 250-255 | colorless crystals     |
| S05-62-4997  |  | C10H7Cl2N2O5P | 337,06 | 182-186 | orange-yellow crystals |
| S05-62-4998  |  | C14H15N2O4P   | 306,26 | 235-238 | yellowish crystals     |
| S06-62-4999  |  | C12H13N2O5P   | 296,22 | 282-285 | colorless crystals     |

|             |                               |               |        |         |                    |
|-------------|-------------------------------|---------------|--------|---------|--------------------|
| S06-62-5000 |                               | C16H15N2O4P   | 330,28 | 215-217 | colorless crystals |
| S06-62-5001 |                               | C16H19N2O5P   | 350,31 | 228-230 | colorless crystals |
| S06-62-5002 |                               | C15H17N2O4PS2 | 384,42 | 253-257 | colorless crystals |
| S07-62-5078 |                               | C10H12N2O7P2  | 334,16 | 248-250 | colorless crystals |
| S07-62-5079 |                               | C11H14N2O7P2  | 348,19 | 270-272 | colorless crystals |
| X           | <b>AMINO-PHOSPHINIC ACIDS</b> |               |        |         |                    |
| X01-65-4806 |                               | C7H12NO2PS    | 205,22 | 224-227 | colorless crystals |
| X01-66-4815 |                               | C5H12NO4PS    | 213,19 | 233-236 | colorless crystals |
| X01-66-4816 |                               | C7H8N3O4P     | 229,13 | 195-198 | colorless crystals |
| X01-66-5009 |                               | C14H23ClN3O2P | 331,79 | 121-123 | colorless crystals |
| X01-71-5023 |                               | C11H19NO5P2   | 307,23 | 179-183 | colorless crystals |



|             |   |              |        |         |                    |
|-------------|---|--------------|--------|---------|--------------------|
| X01-71-5024 |    | C11H15ClNO4P | 291,67 | 197-199 | colorless crystals |
| X01-71-5025 |    | C13H18NO6P   | 315,27 | 215-217 | colorless crystals |
| X01-71-5026 |    | C10H16NO5PS  | 293,28 | 192-197 | colorless crystals |
| X01-71-5027 |    | C8H14NO5PS2  | 299,31 | 207-210 | colorless crystals |
| X01-71-5028 |   | C8H14NO6PS   | 283,24 | 183-186 | colorless crystals |
| X01-71-5029 |  | C13H20NO5PS  | 333,35 | 220-222 | colorless crystals |
| X01-71-5030 |  | C9H14ClNO5P2 | 313,62 | 194-197 | colorless crystals |
| X01-71-5043 |  | C6H11NO6P2   | 255,11 | 183-185 | colorless crystals |
| X03-65-4810 |  | C9H15N2O2P   | 214,21 | 198-199 | colorless crystals |
| Z           | <b>SELECTED NON-PHOSPHORUS COMPOUNDS</b>  |              |        |         |                    |
| Z-02-5034   |  | C11H11NO3S   | 237,28 | 211-215 | yellow crystals    |

SELECTED RECENT COMPOUNDS.xls

|           |   |  |        |         |                      |
|-----------|---|--|--------|---------|----------------------|
| Z-90-5041 |  | C <sub>12</sub> H <sub>14</sub> O <sub>5</sub> S | 270,31 | 75-77   | colorless crystals   |
| Z-90-5044 |  | C <sub>8</sub> H <sub>9</sub> NO <sub>3</sub> S  | 199,23 | 104-108 | colorless crystals   |
| Z-90-5045 |  | C <sub>8</sub> H <sub>9</sub> NO <sub>3</sub> S  | 199,23 | 76-79   | colorless crystals   |
| Z-91-5042 |  | C <sub>11</sub> H <sub>14</sub> N <sub>2</sub> O | 190,25 | 107-109 | pale yellow crystals |