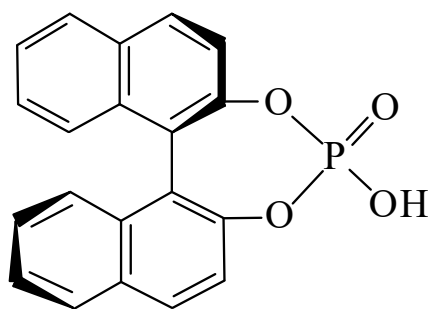




>>Entry Name: 4-Hydroxydinaphtho[2,1-*d*:1',2'-*f*][1,3,2]dioxaphosphepin 4-oxide, 9CI

Synonym(s): 1,1'-Binaphthyl 2,2'-cyclic phosphoric acid



(*R*)-form

CAS Registry Number: 35193-63-6

Related CAS Registry Numbers(s): 50574-62-4

Molecular Formula: C<sub>20</sub>H<sub>13</sub>O<sub>4</sub>P

Molecular Weight: 348.294

Accurate Mass: 348.055147

Percentage Composition: C 68.97%; H 3.76%; O 18.37%; P 8.89%

Use/Importance: Resolving agent for bases, amino acids, and helicenes

Other Data: Resolved *via* strychnine, cinchonine, or cinchonidine salts

Aldrich: 29296-6

>>Variant: (*R*)-form

CAS Registry Number: 39648-67-4

Molecular Formula: C<sub>20</sub>H<sub>13</sub>O<sub>4</sub>P

Molecular Weight: 348.294

Accurate Mass: 348.055147

Percentage Composition: C 68.97%; H 3.76%; O 18.37%; P 8.89%

Physical Description: Solid

Melting Point: Mp 335-337°

Optical Rotation: [α]<sub>D</sub> –609 (c, 0.24 in MeOH)

Aldrich: 24893-2

Fluka: 14380

Sigma: B7012

>>Derivative: Strychnine salt

Physical Description: Solid

Melting Point: Mp 245-247°

>>Derivative: *O*-Me (Me ester)

Synonym(s): 4-Methoxydinaphtho[2,1-*d*,1',2'-*f*][1,3,2]dioxaphosphepin 4-oxide. 2,2'-(1,1'-Binaphthyl) methyl phosphate

CAS Registry Number: 86334-02-3

Molecular Formula: C<sub>21</sub>H<sub>15</sub>O<sub>4</sub>P

Molecular Weight: 362.321

Accurate Mass: 362.070797

Percentage Composition: C 69.62%; H 4.17%; O 17.66%; P 8.55%

Physical Description: Cryst. (C<sub>6</sub>H<sub>6</sub>/petrol)

Optical Rotation: [α]<sub>D</sub><sup>25</sup> –526.8 (c, 1.16 in THF)

>>Variant: (*S*)-form

CAS Registry Number: 35193-64-7

Molecular Formula: C<sub>20</sub>H<sub>13</sub>O<sub>4</sub>P

Molecular Weight: 348.294

Accurate Mass: 348.055147

Percentage Composition: C 68.97%; H 3.76%; O 18.37%; P 8.89%

Physical Description: Cryst.

Melting Point: Mp 350°

Optical Rotation: [α]<sub>D</sub><sup>22</sup> +530 (c, 1.35 in MeOH)