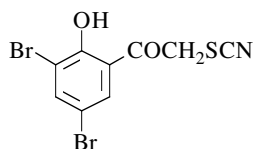


Chapter 10. Compounds derived from S-substituted mercaptoacetic acids

2-(3,5-Dibromo-2-hydroxyphenyl)-2-oxoethyl thiocyanate

$\text{C}_9\text{H}_5\text{Br}_2\text{NO}_2\text{S}$ mol.wt. 351.02



Synthesis

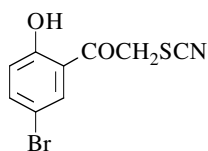
-Obtained by reaction of ammonium thiocyanate with 3,5,α-tribromo-2-hydroxyacetophenone in aqueous acetone at r.t. for 6 h (69%) [1308].

m.p. 142-143° [1308]; IR [1308].

2-(5-Bromo-2-hydroxyphenyl)-2-oxoethyl thiocyanate

[260430-29-3]

$\text{C}_9\text{H}_6\text{BrNO}_2\text{S}$ mol.wt. 272.12



Synthesis

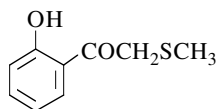
-Obtained by reaction of ammonium thiocyanate with 5,α-dibromo-2-hydroxyacetophenone in aqueous acetone at r.t. for 6 h (88%) [1308].

m.p. 131-132° [1308]; IR [1308].

1-(2-Hydroxyphenyl)-2-(methylthio)ethanone

[56986-82-4]

$\text{C}_9\text{H}_{10}\text{O}_2\text{S}$ mol.wt. 182.96



Synthesis

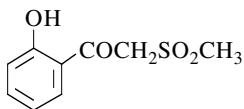
-Preparation by adding a solution of 15% sodium methylmercaptide to a solution of 2-hydroxy-α-bromoacetophenone in methanol in an ice bath. The reaction mixture was stirred for 30 min at r.t. (98%) [1113].

yellow liquid [1113]; MS [1113].

1-(2-Hydroxyphenyl)-2-(methylsulfonyl)ethanone

[39068-36-5]

$\text{C}_9\text{H}_{10}\text{O}_4\text{S}$ mol.wt. 214.24



Synthesis

-Obtained by condensation of methyl 2-hydroxybenzoate with dimethylsulfone carbanion in DMSO (65%) [1162].

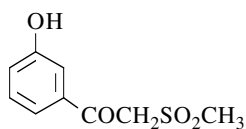
m.p. 139-140° [1162].

1-(3-Hydroxyphenyl)-2-(methylsulfonyl)ethanone

[52945-17-2]

C₉H₁₀O₄S

mol.wt. 214.24

**Synthesis**

-Obtained by condensation of methyl 3-hydroxybenzoate with dimethylsulfone carbanion in DMSO (60%) [1162].

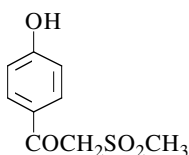
m.p. 168-169° [1162].

1-(4-Hydroxyphenyl)-2-(methylsulfonyl)ethanone

[52945-18-3]

C₉H₁₀O₄S

mol.wt. 214.24

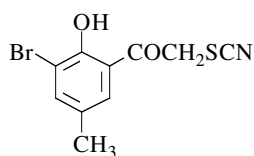
**Synthesis**

-Obtained by condensation of methyl 4-hydroxybenzoate with dimethylsulfone carbanion in DMSO (58%) [1162].

m.p. 173-174° [1162].

2-(3-Bromo-2-hydroxy-5-methylphenyl)-2-oxoethyl thiocyanateC₁₀H₈BrNO₂S

mol.wt. 286.15

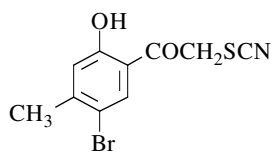
**Synthesis**

-Obtained by reaction of ammonium thiocyanate with 3,α-dibromo-2-hydroxy-5-methylacetophenone in aqueous acetone at r.t. for 6 h (66%) [1308].

m.p. 148-149° [1308]; IR [1308].

2-(5-Bromo-2-hydroxy-4-methylphenyl)-2-oxoethyl thiocyanateC₁₀H₈BrNO₂S

mol.wt. 286.15

**Synthesis**

-Obtained by reaction of ammonium thiocyanate with 5,α-dibromo-2-hydroxy-4-methylacetophenone in aqueous acetone at r.t. for 6 h (73%) [1308].

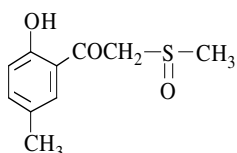
m.p. 122-123° [1308]; IR [1308].

1-(2-Hydroxy-5-methylphenyl)-2-(methylsulfinyl)ethanone

[52159-50-9]

C₁₀H₁₂O₃S

mol.wt. 212.27



Synthesis

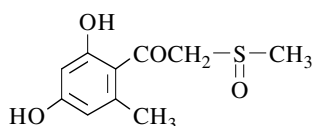
-Refer to: [316].

1-(2,4-Dihydroxy-6-methylphenyl)-2-(methylsulfinyl)ethanone

[478795-87-8]

C₁₀H₁₂O₄S

mol.wt. 228.27



Synthesis

-Obtained by reaction of ethyl 2,4-dihydroxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

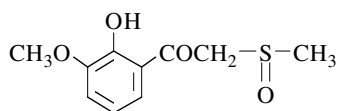
oil [1178].

1-(2-Hydroxy-3-methoxyphenyl)-2-(methylsulfinyl)ethanone

[65220-47-5]

C₁₀H₁₂O₄S

mol.wt. 228.27



Synthesis

-Preparation by reaction of methyl 3-methoxysalicylate (methyl 2-hydroxy-3-methoxybenzoate) with methylsulfinyle carbanion, itself obtained from DMSO and sodium hydride (83%) [1000].

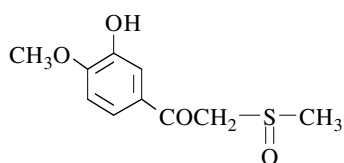
m.p. 140-142° [1000]; TLC [1000].

1-(3-Hydroxy-4-methoxyphenyl)-2-(methylsulfinyl)ethanone

[66100-55-8]

C₁₀H₁₂O₄S

mol.wt. 228.27



Synthesis

-Preparation by reaction of methyl isovanillinate (methyl 3-hydroxy-4-methoxybenzoate) with methylsulfinyle carbanion, itself obtained from DMSO and sodium hydride (89%) [1179].

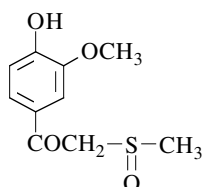
m.p. 158-161° [1179];
¹H NMR [1179], IR [1179].

1-(4-Hydroxy-3-methoxyphenyl)-2-(methylsulfinyl)ethanone

[66100-54-7]

C₁₀H₁₂O₄S

mol.wt. 228.27

**Synthesis**

-Preparation by reaction of methyl vanillinate (methyl 4-hydroxy-3-methoxybenzoate) with methylsulfinyle, carbanion itself obtained from DMSO and sodium hydride (90%) [1179].

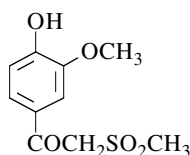
m.p. 151-152° [1179];
¹H NMR [1179], IR [1179].

1-(4-Hydroxy-3-methoxyphenyl)-2-(methylsulfonyl)ethanone

[52945-22-9]

C₁₀H₁₂O₅S

mol.wt. 244.27

**Synthesis**

-Obtained by condensation of methyl 4-hydroxy-3-methoxybenzoate with dimethylsulfone carbanion in DMSO (76%) [1162].

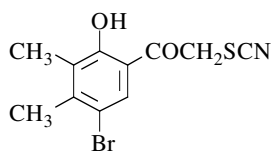
m.p. 157-158° [1162].

2-(5-Bromo-2-hydroxy-3,4-dimethylphenyl)-2-oxoethyl thiocyanate

[260430-31-7]

C₁₁H₁₀BrNO₂S

mol.wt. 300.18

**Synthesis**

-Obtained by reaction of ammonium thiocyanate with 5,α-dibromo-2-hydroxy-3,4-dimethylacetophenone in aqueous acetone at r.t. for 6 h (52%) [1308].

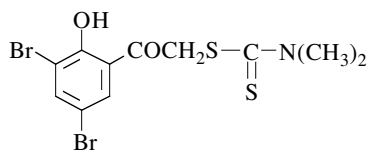
m.p. 149-150° [1308]; IR [1308].

2-(3,5-Dibromo-2-hydroxyphenyl)-2-oxoethyl dimethylcarbamodithioate

[214959-26-9]

C₁₁H₁₁Br₂NO₂S₂

mol.wt. 413.15

**Synthesis**

-Obtained by reaction of 3,5-dibromo-2-hydroxy-α-bromoacetophenone with sodium or piperidinium N,N-dimethyldithiocarbamate in methanol at r.t. for 12 h (72%) [490].

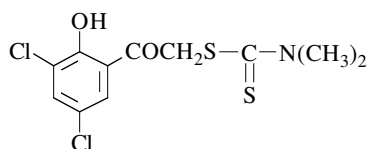
m.p. 164° [490];
¹H NMR [490], IR [490], UV [490].

2-(3,5-Dichloro-2-hydroxyphenyl)-2-oxoethyl dimethylcarbamodithioate

[87669-75-8]

C₁₁H₁₁Cl₂NO₂S₂ mol.wt. 324.2

Syntheses



-Refer to: [267] [269].

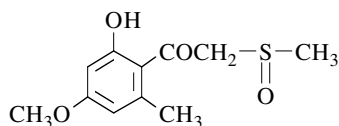
1-(2-Hydroxy-4-methoxy-6-methylphenyl)-2-(methylsulfinyl)ethanone

[104783-89-3]

C₁₁H₁₄O₄S

mol.wt. 242.30

Syntheses



-Preparation by reaction of ethyl 2-hydroxy-4-methoxy-6-methylbenzoate (m.p. 73-74°) with sodium methylsulfinylmethide, itself obtained from DMSO and sodium hydride (85%) [587].
 -Also refer to: [1178].

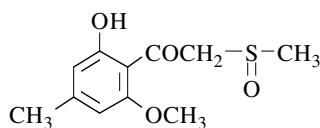
m.p. 146-148° [587]; ¹H NMR [587], IR [587].**1-(2-Hydroxy-6-methoxy-4-methylphenyl)-2-(methylsulfinyl)ethanone**

[205880-83-7]

C₁₁H₁₄O₄S

mol.wt. 242.30

Syntheses



-Preparation by treatment of methyl 2-hydroxy-6-methoxy-4-methylbenzoate (methyl mono-O-methyl-p-orsellinate) (m.p. 94-96°) with sodium methylsulfinylmethide (SM) formed *in situ*. SM was obtained by action of sodium hydride (3 equiv) with DMSO (7 equiv) in

benzene at 50° for 1 h. (78%) [1032].
 -Also refer to: [820].

m.p. 62-64° [1032].

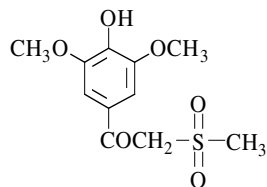
1-(4-Hydroxy-3,5-dimethoxyphenyl)-2-(methylsulfonyl)ethanone

[52945-23-0]

C₁₁H₁₄O₆S

mol.wt. 274.29

Synthesis



-Obtained by condensation of methyl 4-hydroxy-3,5-dimethoxybenzoate with dimethylsulfonyl carbanion in DMSO (74%) [1162].

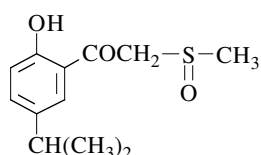
m.p. 154-155° [1162].

1-[2-Hydroxy-5-(1-methylethyl)phenyl]-2-(methylsulfinyl)ethanone

[63220-58-6]

C₁₂H₁₆O₃S

mol.wt. 240.32



Syntheses

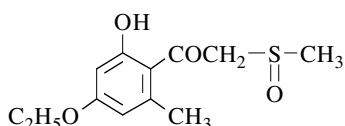
-Refer to: [315] [316].

1-(4-Ethoxy-2-hydroxy-6-methylphenyl)-2-(methylsulfinyl)ethanone

[478795-93-6]

C₁₂H₁₆O₄S

mol.wt. 256.32



Synthesis

-Obtained by reaction of ethyl 4-ethoxy-2-hydroxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

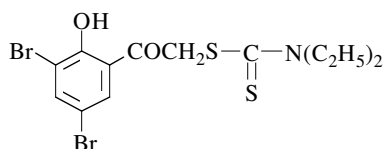
oil [1178].

2-(3,5-Dibromo-2-hydroxyphenyl)-2-oxoethyl diethylcarbamodithioate

[214959-27-0]

C₁₃H₁₅Br₂NO₂S₂

mol.wt. 441.21



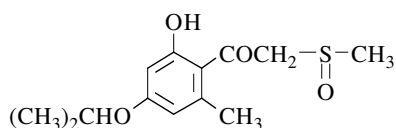
Synthesis

-Obtained by action of 3,5-dibromo-2-hydroxy- α -bromoacetophenone with sodium or piperidinium N,N-diethyldithiocarbamate in methanol at r.t. for 12 h (58%) [490].m.p. 132° [490]; ¹H NMR [490], IR [490], UV [490].**1-[2-Hydroxy-6-methyl-4-(1-methylethoxy)phenyl]-2-(methylsulfinyl)ethanone**

[478795-95-8]

C₁₃H₁₈O₄S

mol.wt. 270.35



Synthesis

-Obtained by reaction of ethyl 2-hydroxy-4-isopropoxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

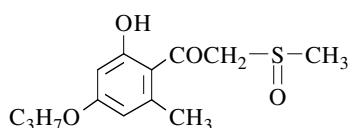
oil [1178].

1-(2-Hydroxy-6-methyl-4-propoxyphenyl)-2-(methylsulfinyl)ethanone

[478795-94-7]

C₁₃H₁₈O₄S

mol.wt. 270.35

**Synthesis**

-Obtained by reaction of ethyl 2-hydroxy-6-methyl-4-propoxybenzoate with sodium methylsulfinylmethide [1178] according to [587].

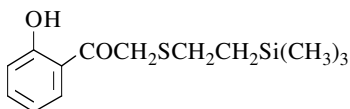
oil [1178].

1-(2-Hydroxyphenyl)-2-[2-(trimethylsilyl)ethylthio]ethanone

[193075-79-5]

C₁₃H₂₀O₂SSi

mol.wt. 268.45

**Synthesis**

-Preparation by adding an ethanolic solution of sodium 2-(trimethylsilyl)ethanethiolate in a solution of 2-chloro-1-(2-hydroxyphenyl)ethanone in dioxane at r.t. for 2 h under nitrogen (99%) [161].

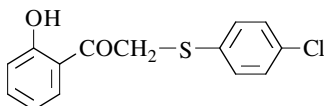
pale yellow oil [161]; ¹H NMR [161], IR [161].

2-[(4-Chlorophenyl)thio]-1-(2-hydroxyphenyl)ethanone

[113272-14-3]

C₁₄H₁₁ClO₂S

mol.wt. 278.76

**Syntheses**

-Preparation by adding dropwise at r.t. an ethanolic solution of sodium 4-chlorothiophenoxide to a solution of 2-hydroxy- α -bromoacetophenone in dioxane and stirring the mixture for a further hour (84%) [338].

-Also refer to: [1273].

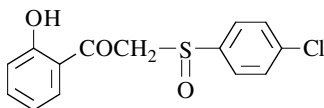
m.p. 83-84° [338]; ¹H NMR [338], IR [338], MS [338].

2-[(4-Chlorophenyl)sulfinyl]-1-(2-hydroxyphenyl)ethanone

[113272-15-4]

[131137-71-8] (\pm)C₁₄H₁₁ClO₃S

mol.wt. 294.76

**Syntheses**

-Preparation by oxidation of α -(4-chlorophenylthio)-2-hydroxyacetophenone in methylene chloride with 3-chloroperoxybenzoic acid at 0° for 5 h (93%) [338].
-Also refer to: [1273].

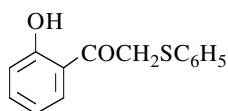
m.p. 131-132° [338];
¹H NMR [338], IR [338], MS [338].

1-(2-Hydroxyphenyl)-2-(phenylthio)ethanone

[56307-98-3]

C₁₄H₁₂O₂S

mol.wt. 244.31



Syntheses

-Preparation by adding an ethanolic solution of sodium benzenethiolate to a solution of 2-hydroxy- α -bromoacetophenone in dioxane at r.t. and stirring for 1 h at the same temperature (77%) [1273] [1416].

-Preparation by condensation of 2-hydroxy- α -bromoacetophenone (or 2-hydroxy- α -chloroacetophenone) with thiophenol in the presence of sodium ethoxide in an ethanol/dioxane mixture (77%) [1421].

-Also refer to: [1113].

m.p. 55° [1416] [1421], 52-54° [1273];

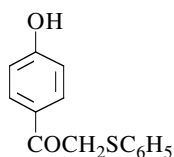
¹H NMR [1273] [1416], IR [1273] [1416], UV [1416] [1421].

1-(4-Hydroxyphenyl)-2-(phenylthio)ethanone

[137524-65-3]

C₁₄H₁₂O₂S

mol.wt. 244.31



Syntheses

-Preparation by adding thiophenol (0.1 ml) and rhodium (II) acetate dimer (2 mg) to a suspension of resin **6** (52 mg) in benzene and the mixture agitated at 50° for 2 h. Resin was filtered, successively washed with methylene chloride, THF and ethyl ether and dried *in vacuo*. A 50% (v/v) solution of TFA in methylene chloride was added to the above resin

and the mixture was agitated at r.t. for 30 min. After, the resin was filtered and washed with methylene chloride, the combined filtrates were concentrated and purified by preparative TLC (ethyl acetate/toluene) to give the titled compound (64%) [682].

N.B.: Resin **6** (resin-bound α -TMS diazoketon **6**) (preparation given).

-Also refer to: [1349].

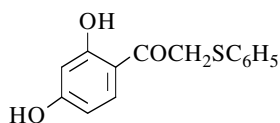
¹H NMR [682], ¹³C NMR [682], IR [682], MS [682].

1-(2,4-Dihydroxyphenyl)-2-(phenylthio)ethanone

[56307-99-4]

C₁₄H₁₂O₃S

mol.wt. 260.31



Syntheses

-Preparation by condensation of 2,4-dihydroxy- α -chloroacetophenone with thiophenol in the presence of sodium ethoxide in a mixture of ethanol/dioxane (93%) [1421].

-Also obtained by condensation of phenylthioacetonitrile with resorcinol (Hoesch reaction) (54%) [1421].

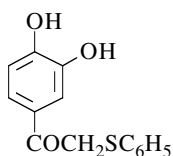
m.p. 152-153° [1421]; UV [1421].

1-(3,4-Dihydroxyphenyl)-2-(phenylthio)ethanone

[131985-77-8]

C₁₄H₁₂O₃S

mol.wt. 260.31



Synthesis

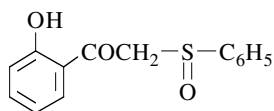
-Refer to: [538] (Japanese patent).

1-(2-Hydroxyphenyl)-2-(phenylsulfinyl)ethanone

[131137-70-7]

C₁₄H₁₂O₃S

mol.wt. 260.31



Synthesis

-Preparation by oxidation of 1-(2-hydroxyphenyl)-2-(phenylthio)ethanone with *m*-CPBA in methylene chloride at 0° for 5 h and water then added (90%) [1273].

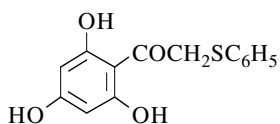
m.p. 117-118° [1273];

¹H NMR [1273], IR [1273], MS [1273].**2-(Phenylthio)-1-(2,4,6-trihydroxyphenyl)ethanone**

[56308-00-0]

C₁₄H₁₂O₄S

mol.wt. 276.31



Syntheses

-Preparation by condensation of phenylthioacetonitrile with phloroglucinol (Hoesch reaction) (85%) [1421].
 -Also obtained by condensation of 2,4,6-trihydroxy- α -chloroacetophenone with thiophenol in the presence of sodium ethoxide in an ethanol/dioxane mixture (20%) [1421].

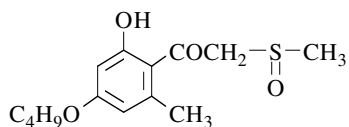
m.p. 173-174° [1421]; UV [1421].

1-(4-Butoxy-2-hydroxy-6-methylphenyl)-2-(methylsulfinyl)ethanone

[478795-98-1]

C₁₄H₂₀O₄S

mol.wt. 284.38



Synthesis

-Obtained by reaction of ethyl 4-butoxy-2-hydroxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

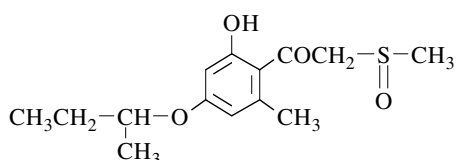
oil [1178].

1-[2-Hydroxy-6-methyl-4-(1-methylpropoxy)phenyl]-2-(methylsulfinyl)ethanone

[478795-97-0]

C₁₄H₂₀O₄S

mol.wt. 284.38

**Synthesis**

-Obtained by reaction of ethyl 4-sec-butoxy-2-hydroxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

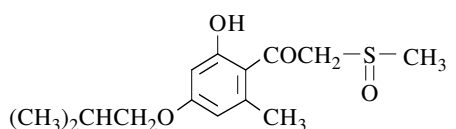
oil [1178].

1-[2-Hydroxy-6-methyl-4-(2-methylpropoxy)phenyl]-2-(methylsulfinyl)ethanone

[478795-96-9]

C₁₄H₂₀O₄S

mol.wt. 284.38

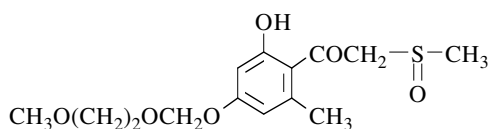
**Synthesis**

-Obtained by reaction of ethyl 4-isobutoxy-2-hydroxy-6-methylbenzoate with sodium methylsulfinylmethide [1178] according to [587].

oil [1178].

1-[2-Hydroxy-4-[(2-methoxyethoxy)methoxy]-6-methylphenyl]-2-(methylsulfinyl)ethanoneC₁₄H₂₀O₆S

mol.wt. 316.38

**Synthesis**

-Preparation by reaction of ethyl 2-hydroxy-4-(2-methoxyethoxy)-methoxy-6-methylbenzoate with methylsulfinyl carbanion, itself obtained from DMSO and sodium hydride (86%) [587].

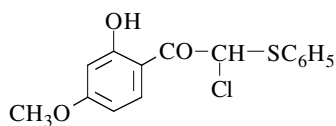
m.p. 106-107° [587]; ¹H NMR [587], IR [587].

2-Chloro-1-(2-hydroxy-4-methoxyphenyl)-2-(phenylthio)ethanone

[153432-53-2]

C₁₅H₁₃ClO₃S

mol.wt. 308.79

**Synthesis**

-Preparation by reaction of N-chlorosuccinimide with 2'-hydroxy-4'-methoxy-2-(phenylthio)acetophenone in carbon tetrachloride under argon at r.t. for 2 h (83%) [411].

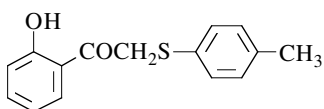
m.p. 49-50°5 [411]; ¹H NMR [411], ¹³C NMR [411], IR [411], MS [411].

1-(2-Hydroxyphenyl)-2-[(4-methylphenyl)thio]ethanone

[108378-94-5]

C₁₅H₁₄O₂S

mol.wt. 258.34



Synthesis

-Preparation by adding an ethanolic solution of sodium 4-methylbenzenethiolate to a solution of 2-hydroxy- α -bromoacetophenone in dioxane at r.t. and stirring for 1 h at the same temperature (83%) [1272] [1273].

m.p. 66-67° [1273]; ¹H NMR [1273], IR [1273].

1-(2-Hydroxyphenyl)-2-[(phenylmethyl)thio]ethanone

[111809-47-3]

C₁₅H₁₄O₂S

mol.wt. 258.34



Synthesis

-Preparation by adding a solution of sodium phenylmethanethiolate in ethanol to a solution of o-hydroxy- α -chloroacetophenone in dioxane at 20° during 40 min and then stirring at the same temperature for 30 min more (84%) [162].

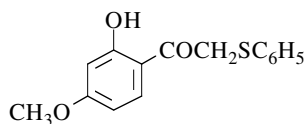
m.p. 64° [162]; ¹H NMR [162], IR [162].

1-(2-Hydroxy-4-methoxyphenyl)-2-(phenylthio)ethanone

[56308-01-1]

C₁₅H₁₄O₃S

mol.wt. 274.34



Syntheses

-Preparation by reaction of sodium thiophenolate with 2-hydroxy-4-methoxy- α -chloroacetophenone in tetrahydrofuran under argon, at r.t. for 10 min (73%) [411].
 -Also obtained by partial methylation of 2,4-dihydroxy- α -phenylthioacetophenone with dimethyl sulfate in the presence of potassium carbonate in acetone for 3 h (64%) [1421].
 -Also obtained by alkaline degradation of 3-(phenylthio)-7-methoxychromone (m.p. 101-102°) with N-sodium hydroxide in dilute methanol for 3 h (96%) [1421].

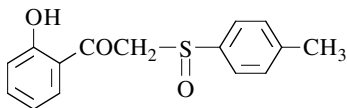
m.p. 42-44° [411], 42-43° [1421]; ¹H NMR [411], ¹³C NMR [411], UV [1421].

1-(2-Hydroxyphenyl)-2-[(4-methylphenyl)sulfinyl]ethanone[108378-95-6](\pm)

[108448-95-9](R)

C₁₅H₁₄O₃S

mol.wt. 274.34



Syntheses

-Preparation by oxidation of 1-(2-hydroxyphenyl)-2-[(4-methylphenyl)thio]ethanone with *m*-CPBA in methylene chloride at 0° for 5 h and water then added (95%) [1273].

-Also refer to: [1272].

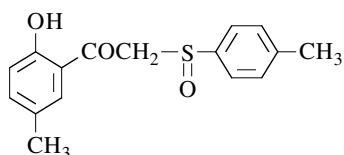
m.p. 118-119° [1273]; ¹H NMR [1273], IR [1273].

1-(2-Hydroxy-5-methylphenyl)-2-[(R)-(4-methylphenyl)sulfinyl]ethanone

[371258-74-1]

C₁₆H₁₆O₃S

mol.wt. 288.37

**Synthesis**

-Preparation at -78° by reaction between methyl 2-hydroxy-5-methylbenzoate and (R)-(+)-methyl p-tolyl sulfoxide in the presence of lithium diisopropylamide (LDA) in THF (91%) [642].

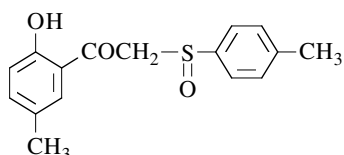
m.p. 128° [642]; $(\alpha)_D^{22} = +134$ to $+148^\circ$ (c = 1 in chloroform) [642];
¹H NMR [642], IR [642], MS [642].

1-(2-Hydroxy-5-methylphenyl)-2-[(S)-(4-methylphenyl)sulfinyl]ethanone

[371258-72-9]

C₁₆H₁₆O₃S

mol.wt. 288.37

**Synthesis**

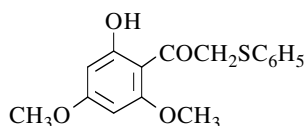
-Refer to: [642].

1-(2-Hydroxy-4,6-dimethoxyphenyl)-2-(phenylthio)ethanone

[56308-02-2]

C₁₆H₁₆O₄S

mol.wt. 304.37

**Synthesis**

-Preparation by partial methylation of 2-(phenylthio)-2',4',6'-trihydroxyacetophenone with dimethyl sulfate in the presence of potassium carbonate in acetone for 2 h (88%) [1421].

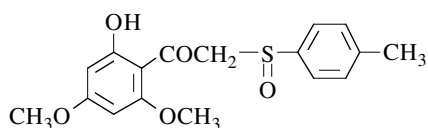
m.p. 75° [1421]; UV [1421].

1-(2-Hydroxy-4,6-dimethoxyphenyl)-2-[(R)-(4-methylphenyl)sulfinyl]ethanone

[371258-80-9]

C₁₇H₁₈O₅S

mol.wt. 334.39

**Synthesis**

-Preparation at -78° by reaction between methyl 2-hydroxy-4,6-dimethoxybenzoate and (R)-(+)-methyl p-tolyl sulfoxide in the presence of lithium diisopropylamide (LDA) in THF (58%) [642].

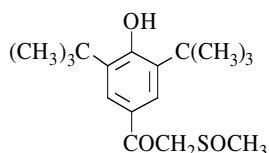
m.p. 107-109° [642]; $(\alpha)_D^{20} = -28$ to -32° (c = 1 in chloroform) [642];
¹H NMR [642], IR [642], MS [642]; TLC [642].

1-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-(methylsulfinyl)ethanone

[115207-18-6]

C₁₇H₂₆O₃S

mol.wt. 310.46

**Syntheses**

-Obtained by reaction of 3,5-di-tert-butyl-4-hydroxybenzoyl chloride with excess DMSO at r.t. (16-18%) [1453].
 -Obtained by acylation of 2,6-di-tert-butylphenol with 2-(methylthio)acetic acid and the intermediate oxidized with m-CPBA [978].

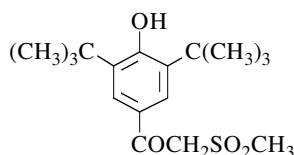
m.p. 143°6-144°9 [978], 61-62° [1453].
 One of the reported melting points is obviously wrong.
¹H NMR [1453], IR [1453].

1-[3,5-Bis(1,1-dimethylethyl)-4-hydroxyphenyl]-2-(methylsulfonyl)ethanone

[191157-34-3]

C₁₇H₂₆O₄S

mol.wt. 326.46

**Synthesis**

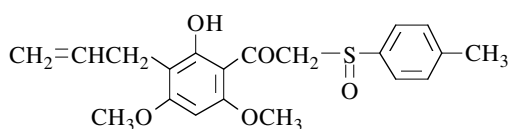
-Refer to: [978].

1-[2-Hydroxy-4,6-dimethoxy-3-(2-propenyl)phenyl]-2-[(S)-(4-methylphenyl)sulfinyl]-ethanone

[371258-84-3]

C₂₀H₂₂O₅S

mol.wt. 374.46

**Synthesis**

-Obtained at -78° in THF using lithium diisopropylamide (LDA), either by reaction between methyl 2-hydroxy-4,6-dimethoxy-3-(2-propenyl)-benzoate and (R)-(+)-methyl p-tolyl sulfoxide in the presence of 1,3-dimethyl-3,4,5,6-tetrahydro-2[1H]-pyrimidinone (DMPU) (this method yields only a trace of the desired compound), or by reaction between 2-hydroxy-4,6-dimethoxy-3-(2-propenyl)benzaldehyde and (R)-(+)-methyl p-tolyl sulfoxide *via* the subsequent oxidation at r.t. by MnO₂ of the intermediate 1-[2-hydroxy-4,6-dimethoxy-3-(2-propenyl)phenyl]-2-(4-methylsulfinyl)ethanol (57%) [642].

m.p. 150-151° [642]; (α)_D³⁰ = +52 to +56° (c = 1.5 in chloroform) [642];
¹H NMR [642], ¹³C NMR [642], IR [642], MS [642];
 TLC [642].