Reaction (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction ID	609281
Reactant BRN	471388 2-hydroxy-benzaldehyde
Product BRN	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	29
Find similar reactions	click here

Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Code	Field Name	Occ.
RX	Reaction Details	29

Reaction Details 1 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	sodium amalgam
	water
Note 1	Handbook
Ref. 1	1523041;Original Document; Journal; Reinecke; Beilstein; JLACBF; Justus Liebigs Ann. Chem.; 128; 1863; 179.

Reaction Details 2 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	copper oxide-chromium oxide
Temperature	145 - 155 C
Pressure	91938.4 Torr
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	1260197;Original Document; Patent; du Pont de Nemours & Co.; US 2127407;

	1934.

Reaction Details 3 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	sodium bicarbonate
	carbon dioxide
	mercury-cathode
Other Conditions	bei der elektrolytischen Reduktion
Note 1	Handbook
Ref. 1	1545533;Original Document; Journal; Shina; MSKIAS; Mem. Coll. Sci. Kyoto Imp. Univ.; <A> 11; 412; CHZEA6; Chem. Zentralbl.; GE; 99; II; 1928; 2331.

Reaction Details 4 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	sodium amalgam
Note 1	Handbook
Ref. 1	1539136;Original Document; Journal; Shoesmith; JCSOA9; J. Chem. Soc.; 123; 1923; 2700.

Reaction Details 5 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	hydrogen
	platinum black
	methanol
Temperature	20 C
Note 1	Handbook
Ref. 1	504722;Original Document; Journal; Vavon; COREAF; C. R. Hebd. Seances Acad. Sci.; 154; 1912; 361; ANCPAC; Ann.Chim.(Paris); <9> 1; 1914; 166.

Reaction Details 6 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	hydrogen
	platinum black
	ethanol
Temperature	20 C
Note 1	Handbook
Ref. 1	504722;Original Document; Journal; Vavon; COREAF; C. R. Hebd. Seances Acad. Sci.; 154; 1912; 361; ANCPAC; Ann.Chim.(Paris); <9> 1; 1914; 166.

Reaction Details 7 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	platinum
	iron (II)-chloride
	alcohol
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	1067514;Original Document; Journal; Voorhees; Adams; JACSAT; J. Am. Chem. Soc.; 44; 1922; 1405.
Ref. 2	506776;Original Document; Journal; Carothers; Adams; JACSAT; J. Am. Chem. Soc.; 46; 1924; 1681.

Reaction Details 8 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	nickel /kieselguhr
Temperature	75 C
Pressure	88260.9 Torr
Other Conditions	Hydrogenation

Note 1	Handbook
Ref. 1	1561289;Original Document; Journal; Covert; Connor; Adkins; JACSAT; J. Am. Chem. Soc.; 54; 1932; 1651, 1658.

Reaction Details 9 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	95 percent (BRN=1907195)
Reagent	nickel boride, chlorotrimethylsilane, cholestanone
Solvent	dimethylformamide
	bis-(2-methoxy-ethyl) ether
Time	1 hour(s)
Other Conditions	Ambient temperature
Ref. 1	5546798;Original Document; Journal; Borbaruah, M.; Barua, N. C.; Sharma, R. P.; TELEAY; Tetrahedron Lett.; EN; 28; 46; 1987; 5741-5742.

Reaction Details 10 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	85 percent Chromat (BRN=1907195)
Reagent	Al, $NiCl_2$*$6H_2O$
Solvent	tetrahydrofuran
Time	10 min
Ref. 1	5592937;Original Document; Journal; Sarmah, Bhabani K.; Barua, Nabin C.; TETRAB; Tetrahedron; EN; 47; 40; 1991; 8587-8600.

Reaction Details 11 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	15 percent Chromat (BRN=1907195)
Reagent	triethylamine, formic acid, $RuCl_2(PPh_3)_3$

Solvent	tetrahydrofuran
Time	30 min
Other Conditions	Ambient temperature
Ref. 1	5552482;Original Document; Journal; Khai, Bui The; Arcelli, Antonio; TELEAY; Tetrahedron Lett.; EN; 26; 28; 1985; 3365-3368.

Reaction Details 12 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	56 percent (BRN=1907195)
Reagent	polymer-bound NADH (2a), $Mg(ClO_4)_2$
Solvent	acetonitrile
	benzene
Time	5 day(s)
Temperature	80 C
Note 1	Further byproducts given
Ref. 1	5555742;Original Document; Journal; Dupas, G.; Bourguignon, J.; Ruffin, C.; Queguiner, G.; TELEAY; Tetrahedron Lett.; EN; 23; 49; 1982; 5141-5144.

Reaction Details 13 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	nickel /kieselguhr
Temperature	100 C
Pressure	117681.3 Torr
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	1549281;Original Document; Journal; Adkins; Cramer; JACSAT; J. Am. Chem. Soc.; 52; 1930; 4349, 4354.

Reaction Details 14 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	69 percent (BRN=1907195)
Reagent	sodium borohydride, alkali
Solvent	methanol
Ref. 1	5628365;Original Document; Journal; Kiong, Lam Soot; Tyman, John H. P.; JCPRB4; J. Chem. Soc. Perkin Trans. 1; EN; 1981; 1942-1952.

Reaction Details 15 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	83 percent (BRN=1907195)
Reagent	H_2, NaOH
Catalyst	Raney nickel
Solvent	H_2O
Other Conditions	hydrogen generated in situ electrochemically on Raney nickel electrode
Ref. 1	5775112;Original Document; Journal; Chiba, Toshiro; Okimoto, Mitsuhiro; Nagai, Hiroshi; Takata, Yoshiyuki; BCSJA8; Bull. Chem. Soc. Jpn.; EN; 56; 3; 1983; 719-723.

Reaction Details 16 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	71 percent (BRN=1907195)
Reagent	$CoCl_2$*$6H_2O$, Zn
Solvent	tetrahydrofuran
Time	2 hour(s)
Temperature	25 C
Ref. 1	5946844;Original Document; Journal; Goswami, Amrit; Borthakur, Naleen; IJSBDB; Indian J. Chem. Sect. B; EN; 33; 5; 1994; 495-496.

Reaction Details 17 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	$NaBH_4$
Ref. 1	6009845;Original Document; Journal; Meier, Chris; ANCEAD; Angew. Chem.; GE; 108; 1; 1996; 77-79.

Reaction Details 18 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	$NaBH_4$
Solvent	propan-2-ol
Ref. 1	6047547;Original Document; Journal; Meier, Chris; Lorey, Martina; Clercq, E. De; Balzarini, Jan; BMCLE8; Bioorg. Med. Chem. Lett.; EN; 7; 2; 1997; 99-104.

Reaction Details 19 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	$NaBH_4$
Note 1	Yield given
Ref. 1	6079570;Original Document; Journal; Meier, Chris; Lorey, Martina; Clercq, Eric De; Balzarini, Jan; NUNUD5; Nucleosides Nucleotides; EN; 16; 7-9; 1997; 1303-1306.
Ref. 2	6118539;Original Document; Journal; Meier, Chris; Clercq Eric De; Balzarini, Jan; EJOCFK; Eur. J. Org. Chem.; EN; 5; 1998; 837-846.

Reaction Details 20 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	$NaBH_4$
Solvent	propan-2-ol
Note 1	Yield given
Ref. 1	6079571;Original Document; Journal; Lorey, Martina; Meier, Chris; Clercq, Eric De; Balzarini, Jan; NUNUD5; Nucleosides Nucleotides; EN; 16; 7-9; 1997; 1307-1310.

Reaction Details 21 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	40 percent (BRN=1907195)
Reagent	$FeCl_3$, Zn
Solvent	dimethylformamide
	H_2O
Time	1 hour(s)
Other Conditions	Ambient temperature
Ref. 1	6090652;Original Document; Journal; Sadavarte, V. S.; Swami, S. S.; Desai, D. G.; SYNCAV; Synth. Commun.; EN; 28; 7; 1998; 1139-1142.

Reaction Details 22 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Yield	95 percent (BRN=1907195)
Reagent	benzyltriethylammonium chloride, Zn
Solvent	methanol
Time	6 hour(s)
Other Conditions	Heating
Ref. 1	6168799;Original Document; Journal; Kardile, G. B.; Desai, D. G.; Swami, S. S.; SYNCAV; Synth. Commun.; EN; 29; 12; 1999; 2129 - 2132.

Reaction Details 23 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	aq.-ethanolic NaOH
	platinized Raney nickel
Other Conditions	Hydrogenation
Note 1	Handbook

Ref. 1	1563356;Original Document; Journal; Delepine; Horeau; BSCFAS; Bull. Soc. Chim. Fr.; <5> 4; 1937; 31, 41.

Reaction Details 24 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	ethanol
	platinum
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	1585103;Original Document; Journal; Dunning; Dunning; Reid; JACSAT; J. Am. Chem. Soc.; 58; 1936; 1565, 1566.

Reaction Details 25 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	ethanol
	platinum
	$FeCl_2$
Pressure	22065.2 Torr
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	1584490;Original Document; Journal; Boeeseken; Gonggrijp; van Rhijn; RTCPA3; Recl. Trav. Chim. Pays-Bas; 57; 1938; 1356.

Reaction Details 26 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	ethanol
	palladium
	$FeCl_2$

Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	506775;Original Document; Journal; Shriner; Adams; JACSAT; J. Am. Chem. Soc.; 46; 1924; 1688.

Reaction Details 27 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	nickel coated zinc-powder
	aqueous KOH
Note 1	Handbook
Ref. 1	1150082;Original Document; Journal; Harlay; COREAF; C. R. Hebd. Seances Acad. Sci.; 213; 1941; 304.

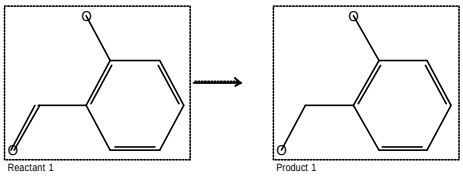
Reaction Details 28 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	aluminium *sec.*-butylate
	sec.-butyl alcohol
Note 1	Handbook
Ref. 1	1552728;Original Document; Journal; Ferrier; COREAF; C. R. Hebd. Seances Acad. Sci.; 220; 1945; 460.

Reaction Details 29 of 29 (Beilstein(2008/01):Reactions:Q01 hit 6, RX.ID 609281)

Reaction Classification	Preparation
Reagent	aqueous formaldehyde
	fine-dispersed silver
	aqueous NaOH
Other Conditions	zuletzt bei Siedetemperatur
Note 1	Handbook

Ref. 1	1986292;Original Document; Journal; Pearl; JOCEAH; J. Org. Chem.; 12; 1947; 85,88.



Reaction (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction ID	798200
Reactant BRN	774890 2-hydroxy-benzoic acid
Product BRN	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	10
Find similar reactions	not available

Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Code	Field Name	Occ.
RX	Reaction Details	10

Reaction Details 1 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction	Preparation

Classification	
Yield	93 percent (BRN=1907195)
Reagent	$(Py)Zn(BH_4)_2$
Solvent	tetrahydrofuran
Time	1.5 hour(s)
Other Conditions	Heating
Ref. 1	6436964;Original Document; Journal; Zeynizadeh, Behzad; Zahmatkesh, Karam; JRPSDC; J. Chem. Res. Synop.; EN; 8; 2003; 522 - 525.

Reaction Details 2 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Ref. 1	6162074;Original Document; Journal; Zemlyakov, A. E.; Kur'yanov, V. O.; Sidorova, E. A.; Chirva, V. Ya.; RJBCET; Russ.J.Bioorg.Chem.(Engl.Transl.); EN; 24; 8; 1998; 551 - 558; BIKHD7; Bioorg. Khim.; RU; 24; 8; 1998; 623 - 630.

Reaction Details 3 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Note 1	Yield given
Ref. 1	6118539;Original Document; Journal; Meier, Chris; Clercq Eric De; Balzarini, Jan; EJOCFK; Eur. J. Org. Chem.; EN; 5; 1998; 837-846.

Reaction Details 4 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Solvent	diethyl ether
Note 1	Yield given
Ref. 1	6079571;Original Document; Journal; Lorey, Martina; Meier, Chris; Clercq, Eric De;

	Balzarini, Jan; NUNUD5; Nucleosides Nucleotides; EN; 16; 7-9; 1997; 1307-1310.

Reaction Details 5 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Note 1	Yield given
Ref. 1	6079570;Original Document; Journal; Meier, Chris; Lorey, Martina; Clercq, Eric De; Balzarini, Jan; NUNUD5; Nucleosides Nucleotides; EN; 16; 7-9; 1997; 1303-1306.

Reaction Details 6 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Solvent	propan-2-ol
Ref. 1	6047547;Original Document; Journal; Meier, Chris; Lorey, Martina; Clercq, E. De; Balzarini, Jan; BMCLE8; Bioorg. Med. Chem. Lett.; EN; 7; 2; 1997; 99-104.

Reaction Details 7 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Ref. 1	6009845;Original Document; Journal; Meier, Chris; ANCEAD; Angew. Chem.; GE; 108; 1; 1996; 77-79.

Reaction Details 8 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	1) $NaBH_4$ 2) I_2
Other Conditions	1) THF, r.t. 2) THF, 1 h, r.t.
Note 1	Yield given. Multistep reaction

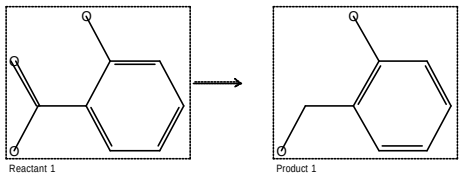
Ref. 1	5592873;Original Document; Journal; Kanth, J. V. Bhaskar; Periasamy, Mariappan; JOCEAH; J. Org. Chem.; EN; 56; 20; 1991; 5964-5965.

Reaction Details 9 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	lead electrodes
	aqueous-alcoholic sulfuric acid
Temperature	35 - 40 C
Other Conditions	bei der elektrolytischen Reduktion
Ref. 1	1545532;Original Document; Journal; Somlo; ZEAPAA; Z. Elektrochem. Angew. Phys. Chem.; 35; 1929; 773.

Reaction Details 10 of 10 (Beilstein(2008/01):Reactions:Q01 hit 9, RX.ID 798200)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
	diethyl ether
Ref. 1	1562201;Original Document; Journal; Nystrom; Brown; JACSAT; J. Am. Chem. Soc.; 69; 1947; 2548.



Reaction (Beilstein(2008/01):Reactions:Q01 hit 12, RX.ID 850983)

Reaction ID	850983
Reactant BRN	1209228 formaldehyde
	969616 phenol
Product BRN	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	3
Find similar reactions	click here

Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 12, RX.ID 850983)

Code	Field Name	Occ.
RX	Reaction Details	3

Reaction Details 1 of 3 (Beilstein(2008/01):Reactions:Q01 hit 12, RX.ID 850983)

Reaction Classification	Preparation

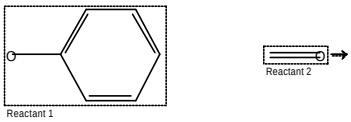
Yield	53 percent (BRN=1907195)
Reagent	H_3BO_3
Solvent	benzene
Time	22 hour(s)
Other Conditions	Heating
Ref. 1	6306218;Original Document; Journal; Belyanin, M. L.; Filimonov, V. D.; Krasnov, E. A.; RJACEO; Russ. J. Appl. Chem.; EN; 74; 1; 2001; 103 - 105; ZPKHAB; Zh.Prikl.Khim.(Leningrad); RU; 74; 1; 2001; 100 - 102.

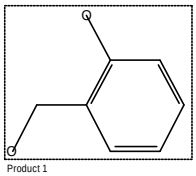
Reaction Details 2 of 3 (Beilstein(2008/01):Reactions:Q01 hit 12, RX.ID 850983)

Reaction Classification	Preparation
Reagent	zinc acetate
Ref. 1	1647783;Original Document; Journal; Fraser et al.; JACHAU; J. Appl. Chem.; 7; 1957; 689, 692.
Ref. 2	1639106;Original Document; Patent; Distillers Co.; US 2839587; 1955.

Reaction Details 3 of 3 (Beilstein(2008/01):Reactions:Q01 hit 12, RX.ID 850983)

Reaction Classification	Preparation
Reagent	cadmium formate <pH 5.6>
Ref. 1	1647783;Original Document; Journal; Fraser et al.; JACHAU; J. Appl. Chem.; 7; 1957; 689, 692.
Ref. 2	1639106;Original Document; Patent; Distillers Co.; US 2839587; 1955.





Reaction (Beilstein(2008/01):Reactions:Q01 hit 35, RX.ID 2703928)

Reaction ID	2703928
Reactant BRN	1905149 1-phenyl-ethanol
	471388 2-hydroxy-benzaldehyde
Product BRN	605842 1-phenyl-ethanone
	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	1
Find similar reactions	click here

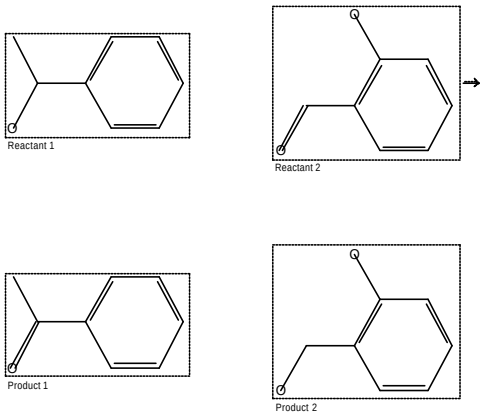
Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 35, RX.ID 2703928)

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/01):Reactions:Q01 hit 35, RX.ID 2703928)

Reaction	Preparation

Classification	
Yield	70 percent Chromat (BRN=1907195)
Catalyst	Sn(IV)ethoxide
Solvent	toluene
Time	20 hour(s)
Temperature	110 C
Ref. 1	5619815;Original Document; Journal; Casiraghi, Giovanni; Casnati, Giuseppe; Sartori, Giovanni; Zanafredi, Girolamo T.; JCPKBH; J. Chem. Soc. Perkin Trans. 2; EN; 1980; 407-411.



Reaction (Beilstein(2008/01):Reactions:Q01 hit 46, RX.ID 3931414)

Reaction ID	3931414
Reactant BRN	971516 2-hydroxy-benzoic acid methyl ester
Product BRN	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	2
Find similar reactions	click here

Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 46, RX.ID 3931414)

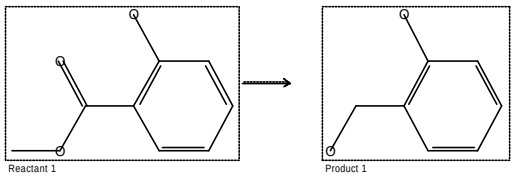
Code	Field Name	Occ.
RX	Reaction Details	2

Reaction Details 1 of 2 (Beilstein(2008/01):Reactions:Q01 hit 46, RX.ID 3931414)

Reaction Classification	Preparation
Reagent	$LiAlH_4$
Solvent	diethyl ether
Ref. 1	5512417;Original Document; Journal; Kraus, Rupert; Spiteller, Gerhard; PYTCAS; Phytochemistry; EN; 29; 5; 1990; 1653-1659.

Reaction Details 2 of 2 (Beilstein(2008/01):Reactions:Q01 hit 46, RX.ID 3931414)

Reaction Classification	Preparation
Yield	70 percent (BRN=1907195)
Reagent	$Zn(BH_4)_2$, cyclohexene
Solvent	tetrahydrofuran
Time	4 hour(s)
Other Conditions	Heating
Ref. 1	6047182;Original Document; Journal; Narasimhan, S.; Madhavan, S.; Prasad, K. Ganeshwar; SYNCAV; Synth. Commun.; EN; 27; 3; 1997; 385-390.



Reaction (Beilstein(2008/01):Reactions:Q01 hit 48, RX.ID 4294389)

Reaction ID	4294389
Reactant BRN	779271 2-acetoxy-benzoic acid
Product BRN	1907195 2-hydroxymethyl-phenol
No. of Reaction Details	3
Find similar reactions	click here

Field Availability List (Beilstein(2008/01):Reactions:Q01 hit 48, RX.ID 4294389)

Code	Field Name	Occ.
RX	Reaction Details	3

Reaction Details 1 of 3 (Beilstein(2008/01):Reactions:Q01 hit 48, RX.ID 4294389)

Reaction Classification	Preparation
Yield	90 percent (BRN=1907195)

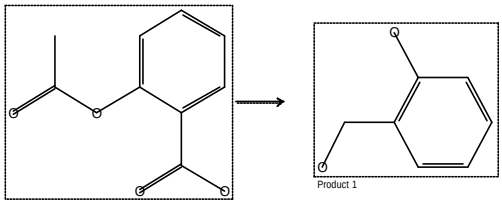
Reagent	$Zr(BH_4)_4$
Solvent	tetrahydrofuran
Time	1 hour(s)
Temperature	25 C
Reaction Type	Reduction
Ref. 1	6250957;Original Document; Journal; Narasimhan, S.; Balakumar, R.; SYNCAV; Synth. Commun.; EN; 30; 23; 2000; 4387 - 4396.

Reaction Details 2 of 3 (Beilstein(2008/01):Reactions:Q01 hit 48, RX.ID 4294389)

Reaction Classification	Preparation
Yield	69 percent (BRN=1907195)
Reagent	tetrabutylammonium borohydride
Solvent	CH_2Cl_2
Other Conditions	Heating
Reaction Type	Reduction
Ref. 1	6224524;Original Document; Journal; Narasimhan, S.; Swarnalakshmi, S.; Balakumar, R.; SYNCAV; Synth. Commun.; EN; 30; 5; 2000; 941 - 946.

Reaction Details 3 of 3 (Beilstein(2008/01):Reactions:Q01 hit 48, RX.ID 4294389)

Reaction Classification	Preparation
Yield	85 percent (BRN=1907195)
Reagent	$Zn(BH_4)_2$
Solvent	tetrahydrofuran
Time	3 hour(s)
Other Conditions	Heating
Ref. 1	5975100;Original Document; Journal; Narasimhan, S.; Madhavan, S.; Prasad, K. Ganeshwar; JOCEAH; J. Org. Chem.; EN; 60; 16; 1995; 5314-5315.



Reactant 1

Product 1