Query

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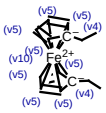
1. Query	 Search as: Product, As drawn, No salts, No mixtures	18 reactions	2012-02-29 07h:35m:50s (EST)

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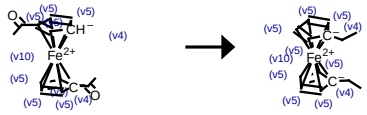
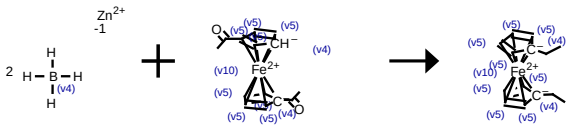


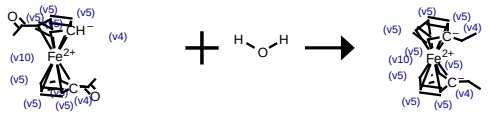
Rx-ID: 26525023 View in Reaxys 1/18

Yield	Conditions & References
92 %	**With** sodium tetrahydroborate **in** dichloromethane, trifluoroacetic acid, B-compd. addn. to stirred Fe-complex soln., mixt. stirring at 25.deg.C for 1 h, diln. (CH2Cl2), quenching in aq. NaOH, org. layer sepn., drying over Na2SO4, solvent removal; residue flash chromy. (SiO2, Et2O/hexanes 1:9) **Bhattacharyya, Sukanta**; Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry; (1996); p. 1381 - 1384 ; (from Gmelin) View in Reaxys
50-70 %	**With** hydrogenchloride, zinc, reduction by Zn in conc. aq. HCl according to Vogel at al., J. Org. Chem. 22 (1957) 1016; fractional distillation at reduced pressure **Domracheva, L. G.; Karyakin, N. V.; Sheiman, M. S.; Kamelova, G. V.; Larina, V. N.; et al.**; Russian Chemical Bulletin; **vol.** 48; (1999); p. 1647 - 1655; Izvestiya Akademi Nauk, Seriya Khimicheskaya; **vol.** 48; (1999); p. 1668 - 1676 ; (from Gmelin) View in Reaxys
	in perchloric acid, acetic acid, hydrogenation reaction with a catalyst 10percentPd on charcoal; room temperature; the second carbonyl group is hydrogenated at 50 .deg. C; **Sokolov, V. I.; Troitskaya, L. L.; Khrusheva, N. S.; Reutov, O. A.**; Doklady Chemistry (English Translation); **vol.** 281; (1985); p. 113 - 115; Doklady Akademii Nauk SSSR; **vol.** 281; (1985); p. 861 - 863 ; (from Gmelin) View in Reaxys



Rx-ID: 26394739 View in Reaxys 2/18

Yield	Conditions & References
90 %	**With** ammonia, zinc(II) chloride **in** tetrahydrofuran, diethyl ether, water, stirring (room temp., 10 h), Et2O and NH3(aq) addn.; extg. (Et2O), drying (Na2SO4), evapn., chromy. (SiO2, hexanes / Et2O = 9: 1) **Bhattacharyya, Sukanta**; Organometallics; **vol.** 15; (1996); p. 1065 - 1066 ; (from Gmelin) View in Reaxys



Rx-ID: 26378396 View in Reaxys 3/18

Yield	Conditions & References
67 %	**With** samarium diiodide **in** tetrahydrofuran, N2-atmosphere; molar ratio SmI2:ferrocene derivative:water=16:1:40, re-fluxing for 16 h; hexane addn., filtration over SiO2 (elution with AcOEt), chromy. (SiO2, 3percent AcOEt in hexane) **Jong, Shean-Jeng; Fang, Jim-Min; Lin, Chun-Hsu**; Journal of Organometallic Chemistry; **vol.** 590; (1999); p. 42 - 45 ; (from Gmelin) View in Reaxys

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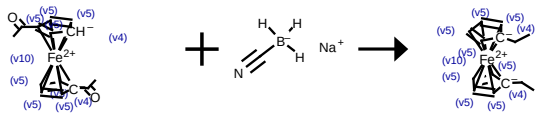
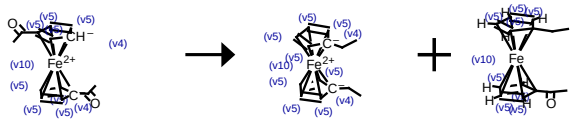


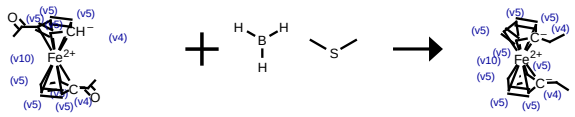
Rx-ID: 26525026 View in Reaxys 4/18

Yield	Conditions & References
94 %	**With** boron trifluoride diethyl etherate **in** tetrahydrofuran, ammonium hydroxide, dichloromethane, addn. of BF3*OEt2 to a stirred soln. of the 1,1'-diacylferrocene in THF at 25.deg.C, addn. of NaBH3CN over 10 min, stirring (1 h), diln. withCH2Cl2, addn. of aq. NH3 to pH 10; layer sepn., drying (Na2SO4), concn., flash chromy. (SiO2; hexanes/Et2O) **Bhattacharyya, Sukanta**; Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999); (1996); p. 4617 - 4620 ; (from Gmelin) View in Reaxys



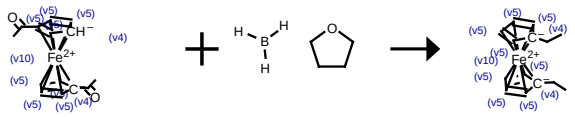
Rx-ID: 26525020 View in Reaxys 5/18

Yield	Conditions & References
27 %, 32 %	**With** $NaBH_4/H_2SO_4$ **in** 1,4-dioxane, stirring (5-20 min); excess water addn., extraction (chloroform), extract washing (water), drying, evapn., rectystn. (alcohol) or chromy. **Shul'pin, G. V.**; Journal of General Chemistry USSR (English Translation); **vol.** 51; (1981); p. 1854 - 1854; Zhurnal Obshchei Khimii; **vol.** 51; (1981); p. 2152 - 2153 ; (from Gmelin) View in Reaxys
29 %, 14 %	**With** chloro-trimethyl-silane, water, zinc **in** tetrahydrofuran, absence of air; addn. of trace water to mixt. of Fe-complex, Zn and Me3SiCl, stirring at room temp. for up to 12 h (TLC monitoring); extn. into ether, washing (water), drying (CaCl2), removal of volatiles)vac.), chromy. (SiO2); elem. anal. **Denifl, Peter; Hradsky, Andreas; Bildstein, Benno; Wurst, Klaus**; Journal of Organometallic Chemistry; **vol.** 523; (1996); p. 79 - 92 ; (from Gmelin) View in Reaxys



Rx-ID: 26388728 View in Reaxys 6/18

Yield	Conditions & References
99 %	**in** tetrahydrofuran, 6 equiv of borane, THF, reflux, 15 min **Routaboul, Lucie; Chiffre, Jerome; Balavoine, Gilbert G. A.; Daran, Jean-Claude; Manoury, Eric**; Journal of Organometallic Chemistry; **vol.** 637 - 639; (2001); p. 364 - 371 ; (from Gmelin) View in Reaxys



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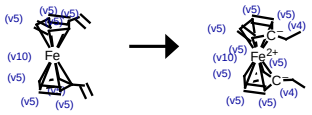
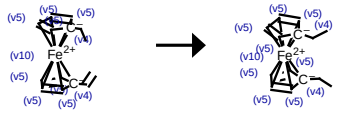
Yield	Conditions & References
86 %	**in** tetrahydrofuran, BH3*THF (1.1 equiv. of a 0.8 M solution in THF) added at room temp. to asoln. of the ferrocenyl ketone (1.0 equiv.) in THF, stirred at room tem p. overnight, water added; extracted with chloroform, dried (MgSO4), concentrated in vacuo, crude product purified by flash column chromatography on silica gel (TLC Rf 0.56 (hexane)), elem. anal. **Carroll, Michael A.; White, Andrew J. P.; Widdowson, David A.; Williams, David J.**; Journal of the Chemical Society, Perkin Transactions 1; (2000); p. 1551 - 1558 ; (from Gmelin) View in Reaxys



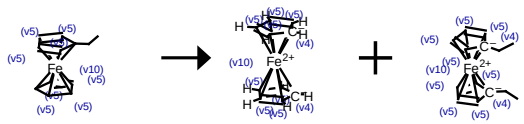
Rx-ID: 26948891 View in Reaxys 8/18

Yield	Conditions & References
	With platinum(IV) oxide, hydrogen **in** ethyl acetate, benzene, stirred for 2 h under 48 psi H2 **Hanlan, A. J. Lee; Ugolick, R. C.; Fulcher, J. G.; Togashi, S.; Bocarsly, A. B.; Gladysz, J. A.**; Inorganic Chemistry; **vol.** 19; (1980); p. 1543 - 1551 ; (from Gmelin) View in Reaxys



Rx-ID: 27060579 View in Reaxys 9/18

Yield	Conditions & References
	With platinum(IV) oxide, hydrogen **in** ethyl acetate, benzene, stirred for 2 h under 48 psi H2 **Hanlan, A. J. Lee; Ugolick, R. C.; Fulcher, J. G.; Togashi, S.; Bocarsly, A. B.; Gladysz, J. A.**; Inorganic Chemistry; **vol.** 19; (1980); p. 1543 - 1551 ; (from Gmelin) View in Reaxys



Rx-ID: 26494294 View in Reaxys 10/18

Yield	Conditions & References
	With lithium aluminium tetrahydride, aluminium trichloride **in** n-heptane, disproportionation; 40.deg.C; **Nesmeyanov, A. N.; Kochetkova, N. S.; Vainberg, A. M.; Krynkina, Yu. K.**; Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya; (1973); p. 914 - 915; Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya; (1973); p. 945 - 946 ; (from Gmelin) View in Reaxys
	in dichloromethane, disproportionation; presence of AlCl3 or GaCl3, in boiling CH2Cl2; **Bublitz, D. E.**; Canadian Journal of Chemistry; **vol.** 42; (1964); p. 2381 - 2384 View in Reaxys **vol.** Fe: Org.Verb.A1; 5.1.1.1.5.4, page 263 - 267 ; (from Gmelin) View in Reaxys
	With $AlCl_3$, $LiAlH_4$ **in** n-heptane, disproportionation; 40.deg.C;

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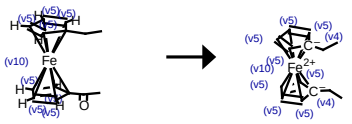
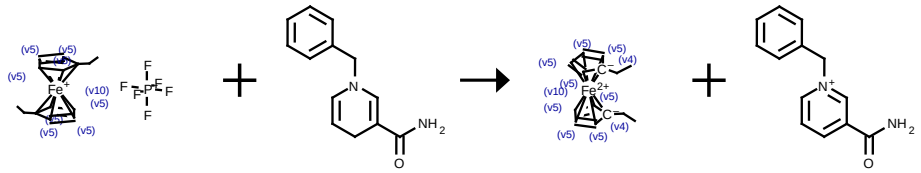
	vol. Fe: Org.Verb.A1; 5.1.1.1.5.4, page 263 - 267 ; (from Gmelin) View in Reaxys



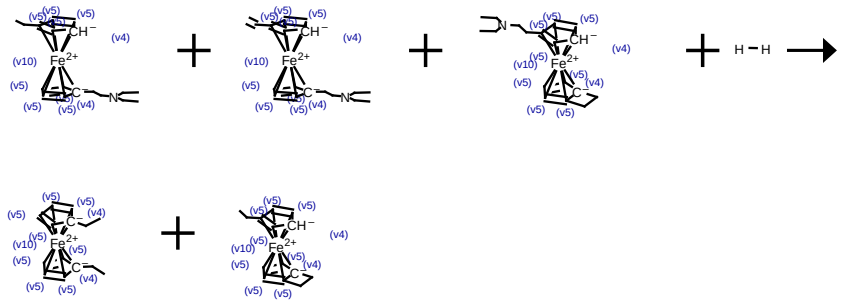
Rx-ID: 26413370 View in Reaxys 11/18

Yield	Conditions & References
	With palladium on activated charcoal, hydrogen **in** trifluoroacetic acid, 1 atm of H2, Pd/C catalyst, 50.deg.C **Sokolov, V. I.; Troitskaya, L. L.; Khrushcheva, N. S.; Reutov, O. A.**; Journal of Organometallic Chemistry; **vol.** 378; (1989); p. 227 - 234 ; (from Gmelin) View in Reaxys



Rx-ID: 26521014 View in Reaxys 12/18

Yield	Conditions & References
	in propan-1-ol, water, Kinetics, 30.deg.C, 50percent aq. 1-propanol, 0.01 M pH 7.0 phosphate buffer, 0.1 M and 0.2 M NaClO4, 15-20-fold excess BNAH **Miller, Larry L.; Valentine, James R.**; Journal of the American Chemical Society; **vol.** 110; (1988); p. 3982 - 3989 ; (from Gmelin) View in Reaxys



Rx-ID: 27460129 View in Reaxys 13/18

Yield	Conditions & References
	With palladium on activated charcoal, *tert*-butyl alcohol, methyl iodide **in** tetrahydrofuran, under N2 atm. MeI was added to mixt. ferrocenes in THF, refluxed for 16 h, volatiles were removed in vacuo, t-BuOH and t-BuOK were added, refluxed for 15 h, cooled, CH2Cl2+H2O were added, org. phase was evapd., dissolved in EtOH, H2-Pd/C, 7 h; react. mixt. was filtered through Celite, filtrate was evapd. in vacuo, reversed-phase HPLC **Joly, Kevin M.; Kariuki, Benson M.; Coe, Diane M.; Cox, Liam R.**; Organometallics; **vol.** 24; (2005); p. 358 - 366 ; (from Gmelin) View in Reaxys

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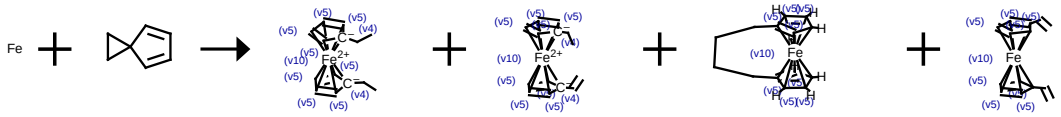
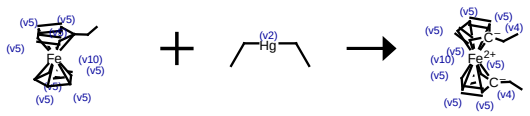


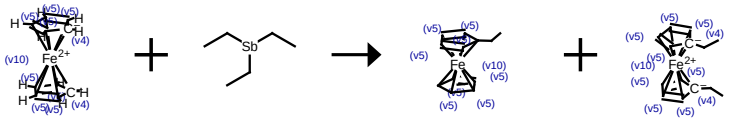
Rx-ID: 26432732 View in Reaxys 14/18

Yield	Conditions & References
	spirodiene and iron was kept under vac. at -196.deg.C for 0.5 h, warmed to room temp.; evapd., extrd., chromd. (silica gel) **Hanlan, A. J. Lee; Ugolick, R. C.; Fulcher, J. G.; Togashi, S.; Bocarsly, A. B.; Gladysz, J. A.**; Inorganic Chemistry; **vol.** 19; (1980); p. 1543 - 1551 ; (from Gmelin) View in Reaxys
	With phosphorous acid trimethyl ester, spirodiene and iron was kept under vac. at -196.deg.C for 0.5 h, trimethyl phosphite was distilled into at 77 K, warmed to room temp.; evapd., extrd., chromd. (silica gel) **Hanlan, A. J. Lee; Ugolick, R. C.; Fulcher, J. G.; Togashi, S.; Bocarsly, A. B.; Gladysz, J. A.**; Inorganic Chemistry; **vol.** 19; (1980); p. 1543 - 1551 ; (from Gmelin) View in Reaxys



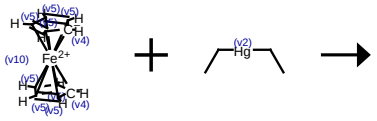
Rx-ID: 26486995 View in Reaxys 15/18

Yield	Conditions & References
	in neat (no solvent), byproducts: ethane, ethylene, butane; Hg-compd. and ferrocene introducing into glass ampul, cooling with liq.nitrogen, evacuation down to 0.01 mm, sealing, placing in air thermostat, heating for 2 h (decompn. start at 255.deg.C); monitoring by DTA; ferrocene derivatives dissoln. (acetone or heptane),column chromy. (column temp. 160.deg.C, vaporizer temp. 300.deg.C); mass spectroscopy **Dodonov, V. A.; Yudenich, S. G.; Druzhkov, O. N.**; Journal of General Chemistry USSR (English Translation); **vol.** 54; (1984); p. 2035 - 2039; Zhurnal Obshchei Khimii; **vol.** 54; (1984); p. 2275 - 2281 ; (from Gmelin) View in Reaxys



Rx-ID: 26502061 View in Reaxys 16/18

Yield	Conditions & References
	in neat (no solvent), thermal decomposition at 260, 300, 340.deg.C **Yudenich, S. G.; Druzhkov, O. N.; Uvarova, N. M.; Dodonov, V. A.**; Journal of General Chemistry USSR (English Translation); **vol.** 53; (1983); p. 2297 - 2301; Zhurnal Obshchei Khimii; **vol.** 53; (1983); p. 2548 - 2552 ; (from Gmelin) View in Reaxys



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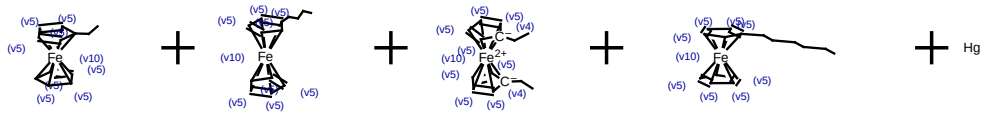
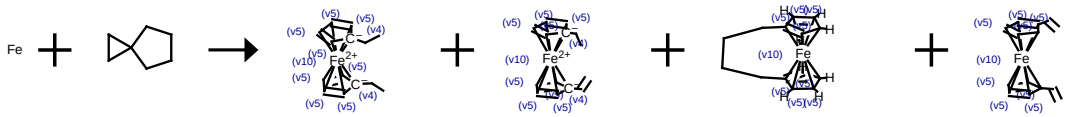


Rx-ID: 26486997 View in Reaxys 17/18

Yield	Conditions & References
	in benzene, reaction of in situ generated ethyl radicals with benzene soln. of ferocene (200.deg.C, sealed evac. ampul); further products and higher homologs of allylferrocene; mass spectroscopy, chromy. **Razuvaev, G. A.; Yudenich, S. G.; Druzhkov, O. N.; Dodonov, V. A.**; Journal of General Chemistry USSR (English Translation); **vol.** 52; (1982); p. 2108 - 2109; Zhurnal Obshchei Khimii; **vol.** 52; (1982); p. 2369 - 2370 ; (from Gmelin) View in Reaxys
	in gas, byproducts: ethane, butane; 205-230.deg.C, sealed evac. ampul; further products and higher higher homologs of allylferrocene; mass spectroscopy, chromy. **Razuvaev, G. A.; Yudenich, S. G.; Druzhkov, O. N.; Dodonov, V. A.**; Journal of General Chemistry USSR (English Translation); **vol.** 52; (1982); p. 2108 - 2109; Zhurnal Obshchei Khimii; **vol.** 52; (1982); p. 2369 - 2370 ; (from Gmelin) View in Reaxys
	in neat (no solvent), byproducts: ethylene, butane; 205-230.deg.C, sealed evac. ampul; further products and higher homologs of allylferrocene; mass spectroscopy, chromy. **Razuvaev, G. A.; Yudenich, S. G.; Druzhkov, O. N.; Dodonov, V. A.**; Journal of General Chemistry USSR (English Translation); **vol.** 52; (1982); p. 2108 - 2109; Zhurnal Obshchei Khimii; **vol.** 52; (1982); p. 2369 - 2370 ; (from Gmelin) View in Reaxys



Rx-ID: 26372094 View in Reaxys 18/18

Yield	Conditions & References
0 %, 0 %, 0 %, 0 %	spirodiene and iron was kept under vac. at -196.deg.C for 0.5 h, warmed to room temp.; evapd., extrd., chromd. (silica gel) **Hanlan, A. J. Lee; Ugolick, R. C.; Fulcher, J. G.; Togashi, S.; Bocarsly, A. B.; Gladysz, J. A.**; Inorganic Chemistry; **vol.** 19; (1980); p. 1543 - 1551 ; (from Gmelin) View in Reaxys

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