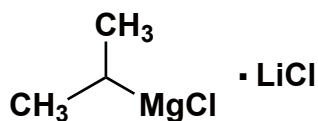


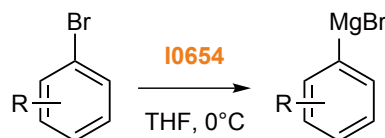
Grignard Reagents

Turbo Grignard Reagents

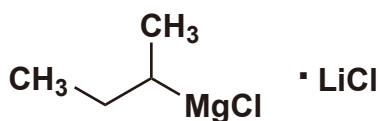
The preparation of functionalized grignard reagents under low temperature is possible.



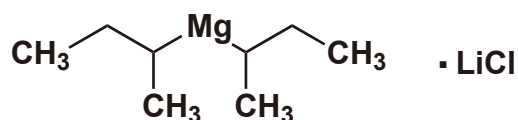
Isopropylmagnesium Chloride - Lithium Chloride
(15% in Tetrahydrofuran, ca. 1mol/L)
100mL [I0654]



A. Krasovskiy, P. Knochel, *Angew. Chem. Inter. Ed.* 2004, 43, 3333.



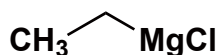
sec-Butylmagnesium Chloride - Lithium Chloride
(15% in Tetrahydrofuran, ca. 1.2mol/L)
100mL [B4643]



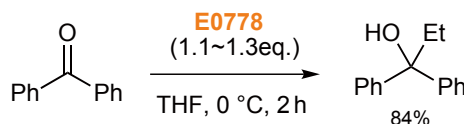
Di-sec-butylmagnesium - Lithium Chloride
(13% in Tetrahydrofuran, ca. 0.8mol/L)
100mL [D4683]

Highly Efficient Alkylating Agent

The alkylation of ketones and aldimines proceeds efficiently by the addition of ZnCl₂.



Ethylmagnesium Chloride
(ca. 1.0mol/L in Tetrahydrofuran)
activated with Zinc Chloride
(ca. 10mol%)
250g [E0778]



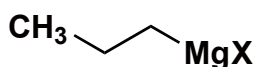
M. Hatano, S. Suzuki, K. Ishihara, *J. Am. Chem. Soc.* 2006, 128, 9998.

Other Grignard Reagents

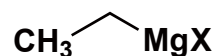


X = Br Methylmagnesium Bromide
(12% in Tetrahydrofuran, ca. 1mol/L)
250g [M0362]
(35% in Ethyl Ether, ca. 3mol/L)
250g [M0785]
(30% in 2-Methyltetrahydrofuran, ca. 3mol/L)
250g [M2237]

X = I Methylmagnesium Iodide
(33% in Ethyl Ether, ca. 2mol/L)
100g [M0364]

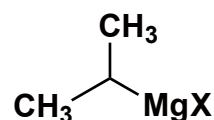


X = Br Propylmagnesium Bromide
(27% in Tetrahydrofuran, ca. 2mol/L)
250g [P0880]



X = Cl Ethylmagnesium Chloride
(18% in Tetrahydrofuran, ca. 2mol/L)
250g [E0135]

X = Br Ethylmagnesium Bromide
(13% in Tetrahydrofuran, ca. 1mol/L)
250g [E0497]
(39% in Ethyl Ether, ca. 3mol/L)
250g [E0134]



X = Cl Isopropylmagnesium Chloride
(11% in Tetrahydrofuran, ca. 1mol/L)
250g [I0543]
(13% in Ethyl Ether, ca. 1mol/L)
250g [I0542]

X = Br Isopropylmagnesium Bromide
(15% in Tetrahydrofuran, ca. 1mol/L)
250g [I0518]



X = Cl

n = 3 **Butylmagnesium Chloride**
(23% in Tetrahydrofuran, ca. 2mol/L)
250g [B0726]

X = Br

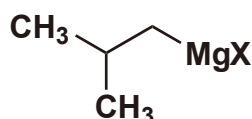
n = 4 **Pentylmagnesium Bromide**
(18% in Tetrahydrofuran, ca. 1mol/L)
250g [P1177]

n = 5 **Hexylmagnesium Bromide**
(20% in Tetrahydrofuran, ca. 1mol/L)
250g [H0821]

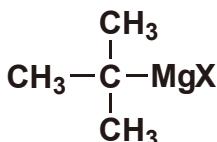
n = 6 **Heptylmagnesium Bromide**
(21% in Tetrahydrofuran, ca. 1mol/L)
250g [H0822]

n = 7 **n-Octylmagnesium Bromide**
(22% in Tetrahydrofuran, ca. 1mol/L)
250g [O0240]

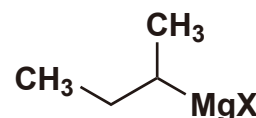
n = 14 **Pentadecylmagnesium Bromide**
(15% in Tetrahydrofuran, ca. 0.4mol/L)
250g [P1251]



X = Br **Isobutylmagnesium Bromide**
(17% in Tetrahydrofuran, ca. 1mol/L)
250g [O517]



X = Cl **tert-Butylmagnesium Chloride**
(23% in Tetrahydrofuran, ca. 2mol/L)
250g [B1148]
(26% in Ethyl Ether, ca. 2mol/L)
250g [B1147]



X = Br **sec-Butylmagnesium Bromide**
(16% in Tetrahydrofuran, ca. 1mol/L)
100g [B1884]

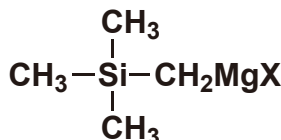


X = Cl **Allylmagnesium Chloride**
(9% in Tetrahydrofuran, ca. 0.9mol/L)
100g [A1554]

X = Br **Allylmagnesium Bromide**
(13% in Ethyl Ether, ca. 0.7mol/L)
100mL [A0963]



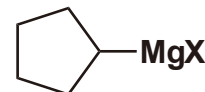
X = Br **Vinylmagnesium Bromide**
(14% in Tetrahydrofuran, ca. 1mol/L)
100g [V0053]



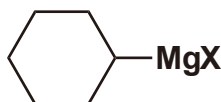
X = Cl **Trimethylsilylmethylmagnesium Chloride**
(18% in Tetrahydrofuran, ca. 1mol/L)
100mL [T2609]
(20% in Ethyl Ether, ca. 1mol/L)
100mL [T1451]



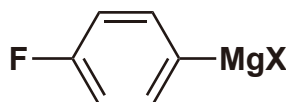
X = Br **Cyclopropylmagnesium Bromide**
(10% in Tetrahydrofuran, ca. 0.7mol/L)
100g [C2039]



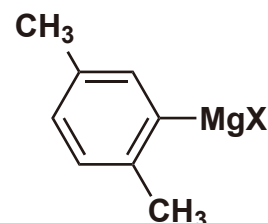
X = Br **Cyclopentylmagnesium Bromide**
(18% in Tetrahydrofuran, ca. 1mol/L)
100g [C1505]



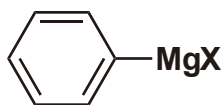
X = Br **Cyclohexylmagnesium Bromide**
(18% in Tetrahydrofuran, ca. 1mol/L)
100g [C1504]



X = Br **4-Fluorophenylmagnesium Bromide**
(19% in Tetrahydrofuran, ca. 1.0mol/L)
250g [F0673]



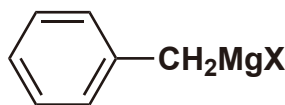
X = Br **p-Xylene-2-magnesium Bromide**
(20% in Tetrahydrofuran, ca. 1mol/L)
100g [D3551]



X = Cl **Phenylmagnesium Chloride**
(27% in Tetrahydrofuran, ca. 2mol/L)
250g [P1381]

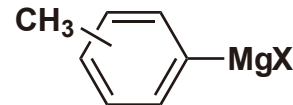
X = Br **Phenylmagnesium Bromide**
(16% in Tetrahydrofuran, ca. 1mol/L)
250g [P2025]

X = I **Phenylmagnesium Iodide**
(42% in Ethyl Ether, ca. 2mol/L)
250g [P0191]



X = Cl **Benzylmagnesium Chloride**
(16% in Tetrahydrofuran, ca. 1mol/L)
250g [B1933]

X = Br **Benzylmagnesium Bromide**
(18% in Tetrahydrofuran, ca. 0.9mol/L)
100g [B3976]



X = Br **o-Tolylmagnesium Bromide**
(17% in Tetrahydrofuran, ca. 0.9mol/L)
100g [T1698]

m-Tolylmagnesium Bromide
(19% in Tetrahydrofuran, ca. 1mol/L)
100g [T1699]

p-Tolylmagnesium Bromide
(19% in Tetrahydrofuran, ca. 1mol/L)
100g [T1700]

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